TITLE 327 WATER POLLUTION CONTROL BOARD

#99-58(WPCB)

SUMMARY/RESPONSE TO COMMENTS FROM THE SECOND COMMENT PERIOD

The Indiana Department of Environmental Management (IDEM) requested public comment from December 1, 1999, through January 14, 2000, with an extension made to the comment period until February 14, 2000, for submission of comments on IDEM=s draft rule language. IDEM received comments from the following parties:

AECON Engineers & Consultants (AECON)

American Electric Power (AEP)

Chastain, Larry H. (Chas)

Dunes Calumet Audubon Society (DCAS)

Earth Source, Inc. (ES)

Farm Credit Services (FCS)

Gary, City of (Gary)

Griffith Izaak Walton Conservation Lands, Inc (GIW)

Halderman Farm Management (HFM)

Hasty, Michael (Hasty)

Hendricks County Planning and Building Department (HendCo)

Hoosier Environmental Council (HEC)

Houston-Davis, Inc. (HDI)

Indiana Association of Soil and Water Conservation Districts, Inc. (IASWCD)

Indiana Builders Association (IBA)

Indiana Chamber of Commerce (ICC)

Indiana Coal Council, Inc. (Coal)

Indiana Department of Natural Resources (IDNR)

Indiana Department of Transportation (IDOT)

Indiana Electric Utility Water Work Group (IEU)

Indiana Energy, Inc (IEI)

Indiana Farm Bureau, Inc. (IFB)

Indiana Forestry and Woodland Owners Association (IFW)

Indiana Manufacturers Association (IMA)

Indianapolis Water Company (IWC)

Izaak Walton League of America, Indiana Division (IWL)

J. F. New & Associates, Inc. (JFN)

Lake County Fish & Game Protective Association, Inc. (LCFGP)

National Solid Waste Management Association, Indiana Chapter (NSWMA)

Neiswinger Inc. (NI)

Nesbitt, Richard A. (Nesb)

NiSource (NiS)

OK Drainage, Inc. (OKD)

Save the Dunes Conservation Fund (SDCF)

Save the Dunes Council (SDC)

Sierra Club, Hoosier Chapter Conservation Committee (SCCC)

Sierra Club, Hoosier Chapter Dunelands Group (SCDG)

Smolka, George E. (Smol)

Southern Indiana Gas and Electric Company (SIGECO)

Valley Watch, Inc. (VWI)

Waste Management, Twin Bridges RDF (WM)

Wiehr, Jr., J. Guilford (Wiehr)

Following is a summary of the comments received and IDEM's responses thereto:

Comment: The draft rule published in the Indiana Register December 1, 1999, requested comments until January 14, 2000. The comment period extended over the Christmas and New Years holidays and made it difficult for the public to prepare comments. A forty-five (45) day extension of the comment period is requested. (AEP, IEU)

Response: Indiana statute requires a thirty (30) day second comment period to be afforded to the public for submitting written responses to a draft rule. The Indiana department of environmental management (IDEM) established a forty-five (45) day comment period in order to account for the year end holidays. However, at the request of the public, the comment period was extended an additional thirty (30) days until February 14, 2000.

Comment: The draft rule published in the Indiana Register December 1, 1999, requested comments until January 14, 2000. In order to prepare constructive comments, gather input from association members, and take into consideration the loss of time over the Christmas and New Years holidays, a thirty (30) day extension of the comment period is requested. (IEI, IFB)

Response: Indiana statute requires a thirty (30) day second comment period to be afforded to the public for submitting written responses to a draft rule. The IDEM established a forty-five (45) day comment period in order to account for the year end holidays. However, at the request of the public, the comment period was extended an additional thirty (30) days until February 14, 2000.

Comment: Indiana wetlands are natural resources and are, therefore, important assets for the benefits they provide. The draft rules have the intent to protect a no net loss of wetland status in Indiana and provide a standard for the water quality of covered wetlands. (IASWCD)

Response: IDEM concurs with this statement. The goal of this rulemaking is to present rules that support the national goal of no net loss of wetlands through regulatory actions and to provide appropriate water quality standards and criteria for Indiana=s wetlands.

Comment: It is arrogant to believe that humans can artificially prevent the natural transformation occurring in very long run stages whereby properly functioning wetlands will naturally fill in themselves without any influence of man and become dry land. (IFB)

Response: Although some wetlands may change into different ecosystems over a significant period of time, their immediate value to the environment and society is not negligible. Wetlands are valued for their uses in flood attenuation, wildlife habitat, groundwater recharge, nutrient cycling, biodiversity, and aesthetics. The uses provided during their existence merit protection, as they confer values to Indiana such as cleaner drinking water, habitat for ducks and geese, and protection from flood damage. Additionally, wetlands may be much more stable features than once thought. The classical idea of succession developed by Clements in 1916 was the dominant paradigm of succession for the first half of the twentieth century but has been replaced by the continuum model of succession pioneered by Gleason in 1917. Under the classical theory, all systems are moving toward an upland climax. Under the continuum theory, changes occur but not toward any particular climax (Mitsch and Gosslink 1986). Mitsch and Gosslink go further by stating that Athere appear to be few, if any, examples of wetland ecosystems that become terrestrial without a concurrent allogenic, meaning that which is not caused by living things inhabiting the wetland, lowering of the water level. Niering (1987) concurs stating that, Athere is little evidence that wetlands are being replaced by upland forests. @. In other words, the classical idea of succession whereby wetlands by their very nature simply fill in and become dry land is outdated and unsupported. Anthropogenic changes, such as increased erosion, drainage, redirection of water, and nutrient pollution, all cause changes of which some may even result in the transformation of wetlands into uplands, but these cannot be seen as natural changes. Furthermore, the language under 327 IAC 2-1.8-6(b) does not regulate natural changes that occur in wetlands. The filling in of a wetland through natural processes such as organic accumulation would not be restricted by this language.

Comment: The general goal of protecting wetlands in Indiana is in the intentions of our company and its subsidiaries so much so that our primary subsidiary in northern Indiana has not permanently filled wetlands in Indiana in at least the last

five (5) years. Another of our subsidiaries is in the process of permitting a wetland bank in northern Indiana to address the mitigation problems identified by IDEM. (NiS)

Response: IDEM applauds conservation efforts of this nature. Those citizens who plan day-to-day activities, operations, and long-term projects to reduce and avoid wetland impacts are an asset to the quantity and quality of wetlands in Indiana.

Comment: Agriculture depends on Indiana=s natural resources as much as any industry or group, and the protection of Indiana=s natural resources is vital to the ability of agriculture to be a productive industry. Agriculture desires the continuation of beneficial uses of land where wetlands might be found; therefore, these draft rules need to clearly state expectations, policy flexibility, and a minimum of transactional costs to landowners and land users. The draft rules fail to clarify the role and impact of agriculture with regard to wetland water quality and water quality certification rules and may actually confuse the wetland issue when considering existing federal programs. (IFB)

Response: IDEM respects the role agriculture plays in Indiana=s economy and its interaction with the natural environment. The draft rules intend to provide predictability and clarity for all persons who may need authorizations to impact wetlands and related aquatic resources. IDEM has worked closely with the Corps of Engineers and the Natural Resources Conservation Service to develop these rules and other policy initiatives, such as the development of a Regional General Permit (RGP). This RGP authorizes certain minimal activities and provides significant relief from administrative burden for many applicants. The draft rules utilize definitions, terms, and concepts which are identical to those used in federal programs thus eliminating conflicting interpretations and mandates. The rules do not change the current regulatory framework and serve to provide a unified approach with federal programs to the regulation of these important resources.

Comment: The draft rules, including amendments concerning special designations of Indiana wetlands and wetland water quality standards, will substantially revise the Indiana water quality standards, be difficult for Indiana industries to comply with, and, in many cases, will not provide continued environmental benefits. The rules must promote allowing landowners to develop their property to its highest and best use simultaneously with providing for wetlands protection. The draft rules contain significant inconsistency between the standards and IDEM=s intent concerning how to apply the standards in situations other than Section 401 water quality certification decisions. There is particular tension and ambiguity between IDEM=s goal to protect wetlands as measured by their high biological, chemical, and physical properties and as important land use tools to filter pollutants and capture storm water of substandard quality. (ICC, IMA)

Response: IDEM believes the proposed rules strike a reasonable balance between protection of sensitive wetlands but are not an absolute prohibition on private development. This is consistent with the approach IDEM has taken over the entire history of the Section 401 Water Quality Certification Program. The structure of the wetland water quality standards and the Section 401 Water Quality rule is similar to that of the water quality standards applicable to other waters of the state and the NPDES permit program rules. The wetland water quality standards reflect the requirement of federal law to adopt water quality standards that apply to all waters of the state. Wetlands are waters of the state and, as such, are protected currently by the water quality standards found at 327 IAC 2. Wetlands perform certain functions such as pollution attenuation; however, this function is often exploited to the detriment of water quality in the wetland and connected waters. Wetlands are not natural wastewater treatment systems; they have the same protections under the federal Clean Water Act and the state water quality standards as any other type of water. Uses such as pollution control or waste assimilation are not designated for rivers nor are such uses designated for wetlands. This does not preclude the use of constructed wetland treatment systems for the purpose of wastewater treatment or the creation of wetlands to act as buffers along streams and rivers. However, Indiana=s natural wetlands, which have been drastically reduced in scope and quality, will be protected by appropriate and wetland specific standards.

Comment: The purpose of these draft rules should be clarified that the rulemaking is to establish water quality standards for wetlands that are a subset of the Awaters of the United States@ and thus subject to Section 404 of the Clean Water Act. If IDEM intends these rules to be broader and seeks to establish water quality standards in all wetlands, this fact needs to be stated and followed upon by greater outreach since the rules essentially become a land use issue that has the potential to affect many more parties who may be unaware that IDEM is undertaking such rulemaking. (IEI)

Response: IDEM has consistently stated throughout this rulemaking process that the wetland water quality standards

apply to all wetlands as defined in this rule. For example, IDEM ⁼s rulemaking website has described the process as follows:

> Indiana is required by federal law to establish water quality standards for all waters of the state including wetlands. This rulemaking will amend rules in 327 IAC 2 to establish specific water quality standards for Indiana ⁼s wetlands. Wetlands are generally areas that have plants, such as cattails, that can live in water or wet soil; are wet (flooded or saturated) for part of the year; and have soils, such as muck or peat, that have formed under wet conditions.

The definition of a wetland has mirrored the federal definition so the universe of wetlands is the same for both federal and state purposes. These rules do not change the current regulatory scope and effect of IDEM ⁼s programs. Wetlands are currently regulated under existing water quality standards with designated uses, narrative criteria, and numeric standards. IDEM is developing a comprehensive outreach program in parallel to these rules to educate citizens about the rulemaking and the importance of wetlands protection.

Comment: The draft rules, in some instances, provide an additional layer of protection beyond that provided by the Army Corps of Engineers in regulating Section 404 fill activities in wetlands; however, this additional layer is, for the most part, an unnecessary duplication of effort and expense for both permittees and the regulatory agency. The Corps of Engineers nationwide permit program provides a relatively simple way to allow wetland usage with only minimal impacts; whereas, the draft rules developed by IDEM will add additional time, expense, and uncertainty to these minimal activities. (AEP, Coal, ICC, IEU, IMA, NiS, NSWMA, SIGECO)

Response: IDEM has administered a Section 401 Water Quality Certification program for close to two (2) decades prior to the development of these rules. The federal Clean Water Act specifically gives powers to the states to administer this program with recognition of individual states ⁼ rights to establish water quality standards specific to the water resources within a given state. This is in addition to the federal Section 404 program administered by the Corps of Engineers. The draft rules for Indiana wetlands do not change the basic way IDEM currently regulates wetlands under Section 401 of the Clean Water Act. They provide clarity for certification applicants as to IDEM ⁼s review process, guidance on steps needed to comply with standards, and defined procedures for review and public involvement. These rules will reduce project delays as applicants will be able to submit completed applications for certification and know fully the questions that must be answered to demonstrate compliance with Indiana law.

Comment: This additional layer of protection for Indiana wetlands could be designed to have some value if the certification process were to be streamlined as much as possible to avoid the situation of having an unnecessary duplication of effort and expense for either the applicant or IDEM. A project such as the installation of a gas line through a wetland where no permanent wetland impact is created should have a Section 401 water quality certification waived. (NiS)

Response: IDEM has taken steps outside of the rulemaking process to streamline administrative requirements. For example, IDEM has granted water quality certification for a variety of general permits, such as some nationwide permits and a regional general permit, that are administered by the Corps of Engineers. IDEM recognizes that certain activities that are temporary or have truly minimal impacts do not need site-specific water quality review. In the case of utility line installation, such as gas lines, this activity is covered by Nationwide Permit 12-Utility Lines. IDEM has granted water quality certification for this nationwide permit meaning that projects for utility line installation do not need a separate, individual water quality certifications. IDEM continues to work with both the Corps of Engineers and the Department of Natural Resources on reasonable methods of administrative streamlining.

Comment: From the viewpoint of one of Indiana ⁼s most active and well respected wetland consulting companies, the draft rules will create an excessive burden on applicants without regard for size or complexity of the proposed activity. This burden will likely result in major opposition to the rules thus jeopardizing the overall goal of a better wetland regulatory process for both the regulators and the regulated public. The intent of the rules to ensure minimization measures, quality mitigation when needed, and accountability are laudable; however, there are many opportunities within the draft rules for businesses to challenge the scientific or economic validity of the requirements. The draft rules have not incorporated

enough of the suggestions of the public that were provided to IDEM at the workgroup meetings held during the development of the rules. (JFN)

Response: IDEM has tried to achieve as much consensus as possible for the provisions of the rules while still fulfilling its obligations under the Clean Water Act and state law. While a person, business, or industry may look at a rule and feel that the rule fails to serve his or her needs closely enough, another interested party representing a different viewpoint may also see the rule as not stringent enough. IDEM gave full consideration to all comments and suggestions provided by workgroup participants, commenters, and interested parties. The substantial changes made in drafts previous to this draft rule are clearly evident; copies of all drafts are available from IDEM or from IDEM =s website at http://www.state.in.us/IDEM/owm/planbr/wqs/rule_and_procedures.htm#Rule Drafts. Additionally, IDEM =s requirements mirror many of the requirements set forth by the Corps of Engineers and the Department of Natural Resources. The rules should reduce cost and uncertainty for applicants by standardizing many key components of the process, such as mitigation requirements, application documentation, and other related reports.

Comment: It is unnecessary to have to receive both a Corps of Engineers Section 404 nationwide permit and a water quality certification from IDEM as the program proposed in the draft rule does not appear to provide substantial environmental gain. (Coal, WM)

Response: The Clean Water Act requires an applicant for a federal permit that may result in a discharge to water to have both a water quality certification and a federal permit. This insures that standards adopted by Indiana are not violated as a part of the federal permitting process. Standards set by Indiana, in turn, benefit the environment by recognizing aquatic resources within the state and setting specific criteria to protect those resources. This protection is not sufficiently provided by the federal permitting program.

Comment: It seems these draft rules might be in conflict with wetland definitions and regulations from the U.S. Department of Agriculture=s Natural Resource Conservation Service (NRCS). How is an Indiana farmer supposed to know which regulatory regime applies? Did IDEM coordinate these draft rules with other state and federal agencies? (IFB)

Response: All definitions and terms that overlap regulations and definitions from the U.S. Department of Agriculture =s NRCS are identical. IDEM obtained the definitions pertaining to the Farm Bill from the regulations promulgated by the NRCS and coordinated all drafts with the NRCS to insure accuracy. In addition, the drafting of Indiana =s wetland rules has been coordinated with the Environmental Protection Agency, the Corps of Engineers, the U.S. Fish and Wildlife Service, the Department of Natural Resources, and the Department of Transportation to insure consistency with existing rules. A person regulated by these rules will know that the basic definitions and terms are consistent throughout all agencies.

Comment: It is not objectionable that IDEM may want to clarify its current wetland policies; however, the draft rules appear to go far beyond the role of clarification. (IEU, SIGECO)

Response: It is not just the pursuit of clarification that is to be achieved by these wetland rules, but also the establishment of clear standards that will apply to all applicants for water quality certification. The rules will help ensure consistency.

Comment: A rule establishing an objective and clear process and criteria for decision making on applications for Section 401 water quality certifications is needed in Indiana. Uncertainties and ambiguities in the existing, rather undefined process have led to misunderstandings and animosities among parties to such decisions in recent years. (ICC)

Response: IDEM agrees that the current process and criteria for decision making could be clearer and has sought to achieve this goal through these draft rules.

Comment: Establishing formalized rules for wetland water quality standards is a worthy pursuit, but there is great concern that the rules will be used to favor one extreme or another without scientific justification. The public comment process has brought about a polarization of issues, one being the use of absolutes when applied to the evolving science of wetlands and wetland mitigation. It is critical to remain flexible in wetland regulation and mitigation design. Implementation of rules that are too rigid or based on preconceived notions and poor science may prevent a project from

achieving the most ecologically viable option. (ES)

Response: IDEM has taken great care to insure that these rules permit flexibility in areas where wetland science is continually evolving. Wetland mitigation design, monitoring, and assessment are left broad so as to allow for the development of new ideas, technologies, and techniques. IDEM has established standardized reporting criteria which will allow various techniques to be compared and evaluated. IDEM continues to evaluate and research new concepts regarding wetland mitigation, and IDEM recognizes that much of this effort is undertaken in the private sector. The rules are drafted, with careful consideration of the weaknesses and strengths of current science, to provide a meaningful framework for the careful regulation of wetlands.

Comment: IDEM is to be commended for moving forward with rules to provide specific wetland water quality standards as well as specific procedures and criteria for review of Section 401 applications. Adoption and implementation of these rules will place new burdens on IDEM =s Office of Water Management staff. The public deserves the confidence that these new rules will be effective in protecting Indiana =s waters; therefore, IDEM should provide a report describing how it will meet its obligations under these rules and whether additional staff and financial resources are needed. IDEM should also seek the resources to fully computerize its Section 401 records and make them accessible through the internet so that the public can gain a broader perspective on the cumulative impact of proposed wetland projects in Indiana. Considerable work and time on the parts of many within and outside of IDEM have gone into the development of the rules, but they will not result in meaningful water quality protection and improvement unless IDEM has the ability to implement them fully, effectively, and in a timely fashion. (DCAS, GIW, IWL, SCCC, SCDG, SDCF, HEC)

Response: IDEM has already taken the necessary steps to address potential resource gaps. By the end of the year 2000, IDEM will have a modern, computerized certification tracking database, fully accessible from the internet. This database will enable many processes to become automated, freeing staff time to focus on project reviews and compliance. This resource was funded in part by grants obtained from the Environmental Protection Agency. IDEM is piloting an additional program to use remote sensing to complement existing staff in tracking wetland losses and gains. IDEM is working through the Indiana Wetland Conservation Plan Technical Advisory Team to develop plans for a wetland inventory project. IDEM maintains a full website with information on the water quality certification program, and IDEM plans to continue to modernize the site to add relevant information on these rules for the public to understand, information on how to submit certain documents required by these rules, and information on the status of Indiana =s wetland resources. As well, IDEM, with funding from an Environmental Protection Agency grant, will have a completely new outreach program, having a central purpose to meet with customer groups to explain the rules, provide education about the value of Indiana =s wetlands, and guide persons through the regulatory process so as to minimize confusion, reduce delays, and avoid potential violations.

Comment: If the purpose of these rules is to create water quality standards for all wetlands, the rules should continue on two (2) distinct tracts with the 327 IAC 17 to clarify IDEM procedures and criteria used when evaluating a Section 401 application expedited since it codifies current policy and serves to eliminate existing confusion in this program. (IEI)

Response: Both wetland water quality standards and water quality certification review procedures are vital to an efficient, thorough, and fair regulatory program. It would be inappropriate to have one rule without the other since both rules define the resource, set standards for its protection, and outline review processes for projects that may impact a wetland resource. It is reasonable and necessary to develop both rules concurrently.

Comment: The draft rules contained in Article 17 will not contribute to the protection of wetlands nor the improvement of the mitigation program. The rules would, however, subject the City of Gary and its development partners to insurmountable barriers in the expansion and redevelopment of key economic drivers for the region such as the Gary Chicago Airport. The new rules make it next to impossible for those who seek to follow the law to receive a permit *[sic. water quality certification]* ; yet, for projects that receive less public scrutiny, the draft rules will simply provide the justification for owners and developers to take the risk and avoid the permitting process altogether. IDEM could save more wetlands by putting resources into inspection and monitoring illegal wetland filling than by adding more requirements and time delays to the permitting process *[sic. water quality certification process]* . (Gary)

Response: The draft rules provide a fair and balanced framework for regulating Indiana =s resources. A significant amount

of time has been spent in this process working with stakeholders and customer groups to develop these rules to protect Indiana=s vital wetland resources and allow for appropriate development and enhancement of Indiana =s economy. IDEM is improving compliance efforts through partnerships with the Environmental Protection Agency, the Corps of Engineers, and the Department of Natural Resources. Persons seeking to avoid rule requirements will be subject to compliance and may face penalties from more than one (1) agency. IDEM can and will enforce these rules to protect wetland resources.

Comment: If Indiana wishes to assume primacy over permitting discharges of fill material into waters within the state =s boundaries, then the state must comply with the requirements of Clean Water Act Section 404(g)(1), 33 U.S.C. ' 1344(g)(1). If Indiana does not wish to assume primacy over Section 404 permitting, then these draft rules are a massive and unnecessary duplication of existing regulation and also appear to invade the responsibilities of the U.S. Fish and Wildlife Service and the IDNR with respect to protection of federal and state endangered and threatened species. The draft rule is fundamentally flawed and should be written to govern only water quality aspects of dredge and fill permitting. (Coal)

Response: IDEM is not seeking to assume primacy over the dredged or fill material permit program pursuant to Section 404(g) of the Clean Water Act at this time. Although many provisions of the rules are similar to those followed by the Corps of Engineers under Section 404, the state rules are not merely a duplication of existing regulation. The scope of authority of the two (2) agencies is different and that fact is reflected in the rules. For example, one (1) of the factors considered by the Corps but not IDEM is whether a project will affect navigation. As another example, IDEM will determine whether a proposed project will violate state water quality standards. The Corps of Engineers is not required to make this determination but must defer to IDEM =s determination. Furthermore, the draft rules do not invade the responsibilities of the USFWS and IDNR with respect to endangered and threatened species. Those two (2) agencies regulate the taking of endangered and threatened species. IDEM is merely using the presence of such species or their habitat as a criterion for elevating a wetland to a higher level of protection. IDEM has coordinated with staff from both agencies and has their support for the rule.

Comment: The draft rules are littered with undefined, nonscientific, discretionary powers, and ambiguous terms. It, furthermore, is no longer a certification process as intended by the Clean Water Act but has become a major permitting process and should be described as such. In previous comments, IDEM responded that these draft rules do not substantially change the way the water quality certification program is currently implemented. However, if that is the truth then the current program is in violation of statutory and board authority. (SIGECO)

Response: IDEM has tried to be as specific and clear as possible with the terms used in the rule. However, the water quality certification process is not a precise, mathematical process but involves the use of best professional judgment on the part of both IDEM and applicants. The process of rulemaking involves compromises, and provisions that frustrate one because they are seen as too lenient or ambiguous frequently please another who sees them as providing flexibility. The water quality certification under section 401 is not merely a statement of certification. Section 401(d) of the CWA requires IDEM to include any limitations and requirements necessary to assure that the applicant complies with the appropriate provisions of state and federal law. Indiana =s current 401water quality certification program is not in violation of statutory or board authority.

Comment: IDEM should certify all of the Section 404 nationwide permits thereby reducing the additional burden these new wetland rules will impose on the regulated community. (AEP)

Response: It is inappropriate for IDEM to issue certifications for all current Section 404 nationwide permits because some of the permits as written would authorize activities that would violate Indiana water quality standards and cause significant wetland destruction. While this course of action may marginally reduce administrative burden, it would have clear and measurable adverse impacts not only on wetlands but also on water quality within Indiana =s streams, rivers, and lakes. For this reason, IDEM will not approve all Section 404 nationwide permits.

Comment: The language of 327 IAC 17-1-3 does not distinguish between individual and general Corps of Engineer permits and would prohibit any person from conducting an activity that requires a permit and that could result in a discharge into waters of the U. S. without a water quality certification under 327 IAC 17. The Corps of Engineers has determined that certain nationwide permits do not require water quality certifications because they are not reasonably

expected to result in a discharge and other nationwide permits may require water quality certifications for some projects but not others. Also, the Corps of Engineers Division *[Sic. District]* ????Engineer has the right to decline to require individual permits for certain activities authorized by a nationwide permit where a state has denied water quality certification. Nothing in the Clean Water Act or in Indiana Code 13 authorizes IDEM to prohibit activities permitted by the Corps of Engineers on the basis that no water quality certification has been obtained. (Coal)

Response: 327 IAC 17-1-3 is merely a restatement of relevant parts of section 401(a)(1) of the CWA. Pursuant to the CWA, if the activity may result in a discharge into navigable waters, then the applicant for a federal permit or license must provide the federal agency with a water quality certification. If the state agency fails to act within one (1) year, then the certification is deemed waived. The Corps of Engineers regulations appear to be an attempt to implement these provisions; in fact, any attempt to go beyond what is authorized or required by the Act would not be valid. If IDEM has granted certification for a specific nationwide permit, then an individual Section 401 water quality certification (WQC) for individual applicants is not needed. If IDEM has denied certification for a specific nationwide permit, then an individual WQC from IDEM is needed regardless of whether the Corps still wishes to process the application under a Corps nationwide permit or chooses to require a Corps individual permit. The Corps = refusal to require an individual permit for certain activities otherwise authorized by a nationwide permit does not eliminate the need for an individual WQC.

Comment: Coal mining operations are already subject to extensive regulation for the protection and enhancement of wetlands according to the Surface Mining Control and Reclamation Act of 1977 (SMCRA), and no useful purpose would be served by increasing the regulation as intended by 327 IAC 17. It is suggested that if IDEM should go forward with these draft rules, then existing water quality certification for nationwide permits for surface mining activities (NWP 21) should be maintained for all wetlands, both Tier I and Tier II. It will also be necessary for IDEM to maintain its water quality certification for NWP 21 at each successive reauthorization. (Coal)

Response: IDEM has not yet taken final action on the nationwide permits that were proposed by the Corps on March 9, 2000. IDEM is considering granting certification for NWP 21.

Comment: Contrary to a response by IDEM to a first comment period comment, another interpretation of Section 401 of the Clean Water Act is that it contains no clear requirement of a certification of Ano impact@; therefore, IDEM may issue a certification without requiring compensatory mitigation. The Clean Water Act only requires certification that an applicant meet applicable or appropriate limitations and comply with water quality standards. According to EPA =s Water Quality Standards for Wetlands National Guidance of July, 1990, a certification may be denied if there are Asignificant losses@ of wetlands, but IDEM is not legally required to follow the EPA Guidance because the guidance has not been subjected to appropriate and adequate national administrative procedures for rulemaking, including, but not limited to, economic analyses. (IMA)

Response: IDEM agrees that it is not legally required to follow EPA =s Water Quality Standards for Wetlands National Guidance of July, 1990. IDEM is required to determine whether a project would meet water quality standards. Included in the water quality standards are the antidegradation rules of 327 IAC 2-1-2 and 327 IAC 2-1.5-4, the designated uses rules of 327 IAC 2-1-3 and 327 IAC 2-1.5-5, and the narrative water quality standards of 327 IAC 2-1-6(a) and 327 IAC 2-1.5-8(b). In order to prevent degradation, comply with the narrative water quality standards, and meet the designated uses, IDEM requires compensatory mitigation for wetland fills. Mitigation is actually a result of interpreting the rules flexibly to allow projects to go forward; otherwise, IDEM would have to deny certification for most wetland fills.

Comment: Reflecting upon two (2) responses made by IDEM in the Summary/Response to Comments from the First Comment Period where it is stated that water quality certifications must comply with the Clean Water Act, state water quality standards, and any other applicable state law, it would be extremely helpful to the regulated community to understand IDEM=s determination of all existing state law that is affected by these draft rules. (IEI)

Response: This rule will reside in 327 IAC 2 and may affect existing water quality standards found at 327 IAC 2. This rule should not affect other state law. However, applicants may be subject to other state laws and regulations.

Comment: The meaning of Asignificant impact@ should not be based upon the concept that any loss of a wetland is a

potential violation of a state water quality standard because to do so would be in conflict with EPA guidance. If appropriate mitigation is provided, then filling of a wetland should not be considered a violation of a water quality standard, and there should be *de minimis* exceptions for filling when mitigation is not required. IDEM has considerable flexibility under federal law to allow the discharge of dredged and fill materials into wetlands, including the authority to incorporate provisions in water quality certifications; therefore, to limit the ability to obtain a water quality certification is an inappropriate use of water quality standards. (ICC, IMA)

Response: It remains true that any loss of wetland is a potential violation of a state water quality standard. However, IDEM has interpreted its rules so that IDEM may allow wetlands to be filled under certain conditions including the applicant =s provision of adequate compensatory mitigation. The draft rules also contain a provision allowing the Commissioner to determine that mitigation is not required if the wetland impact is less than one-tenth (0.1) acre and there is no significant impact on water quality.

Comment: The draft rules appear to have been written without regard to the Indiana Wetlands Conservation Plan developed by the Indiana department of natural resources after an extensive process of information gathering, input, and review by a variety of interests across the state. The draft rules come very close to being a taking of property. (HendCo)

Response: IDEM participated in as an active partner in the development of the in the Wetland Conservation Plan, and the draft wetland rules were specifically written with careful regard to the goals, ideas, and concepts presented in that plan. For example, as part of the plan, a survey was conducted of Indiana residents regarding their views concerning wetlands and thoughts on protection. The following information was learned from the survey: (1) seventy-nine percent (79%) of citizens know wetlands exist in Indiana; (2) sixty-one percent (61%) of citizens believe wetlands are declining in Indiana; eighty percent (80%) of citizens strongly or moderately support efforts to protect Indiana =s wetlands; and seventy-eight percent (78%) of citizens strongly or moderately support state regulations designed to protect Indiana =s wetlands. The plan specifically addresses the need to reduce regulatory confusion and provide clarity, and these rules have met that goal and establish a clear process for obtaining water quality certification. IDEM is confident these draft rules will not constitute a taking of property.

Comment: The IDNR supported Indiana Wetlands Conservation Plan (1996) points out that an insufficient amount of scientific information exists to adequately assess whether interference with wetlands can in the long term be an effective and cost efficient conservation strategy. These draft rules, by allowing wetland interference and setting up of replacement strategies and ratios, are destroying crucial health of both wetlands and surrounding uplands. The interrelationship between wetlands and their surrounding upland areas are undeniable, and the viability of both are being forever affected by interfering with them. The effects of interference are cumulative and occur very slowly, perhaps on a geologic time scale with associated costs of great magnitude. (Smol)

Response: IDEM agrees that more information is needed on wetland ecology and restoration science. IDEM has been studying wetland compensatory mitigation for the last two (2) years and has been an active member of the Indiana Wetland Conservation Plan =s Technical Advisory Team. IDEM will continue to work with our federal, state, and local partners to address the needs identified by the plan. Furthermore, the draft rules establish that wetlands should be impacted only as a last resort (according to 327 IAC 2-1.8-5(b)(1)(A), 327 IAC 2-1.8-5(b)(2)(A)(i), and 327 IAC 2-1.8-5(d)(4)) and that certain wetlands are not replaceable or would entail such a risk as to necessitate their replication before impacts are allowed to occur.

Comment: These wetland water quality standards and water quality certification rules need integration with the Indiana Wetlands Conservation Plan that calls for planning and implementation of wetland conservation partnerships called focus areas. Water quality certification applications for projects located in these focus areas should be reviewed by IDEM with consideration of the conservation plan including its priorities for wetland conservation and monitoring success in achieving the goals of the plan. (DCAS, IWL, SCCC, SDCF, VWI)

Response: IDEM has been an active member of the Indiana Wetland Conservation Plan =s Technical Advisory Team. IDEM will continue to work with our federal, state, and local partners to address the needs identified by the plan and to implement the plan. IDEM does and will continue to consider the plan when evaluating Section 401 Water Quality Certification applications in wetland focus areas. IDEM is committed to the plan and to insuring that well planned

conservation efforts are not placed in conflict with potential wetland impacts. IDEM will continue to emphasize strong project planning including projects designed to mesh with watershed projects, conservation efforts, and other related activities.

Comment: IDEM must perform an economic analysis of the potential loss of property value and property tax income to local governments these wetland rules may have on property owners and local governments. This analysis is imperative because development can greatly increase property values and generate increases in local real estate tax revenues which are integral to the viability of many local governments. (ICC, IEI, IMA)

Response: IDEM does not expect these rules to create any adverse economic impacts. Section 401 of the Clean Water Act already requires persons to obtain a water quality certification, and the current water quality standards of 327 IAC 2 already apply to wetlands so the draft rules are not expected to cause any change in the local tax base.

Comment: Indiana spending on water quality protection and conservation ranks forty-first (41st) in the nation. Our neighboring state of Illinois is spending twenty-one dollars ($21) per capita and ranks eighth (8th) in the nation. Indiana=s spending per person is just three dollars thirty-two cents ($3.32). Why is the disparity so great? (LCFGP)

Response: This may be a valid statement but does not address provisions or issues directly concerning the draft rules; therefore, IDEM does not have a response.

Comment: Public policy expressed in rules must be clearly defined so those to be regulated by the standards understand the requirements. The implications of land use policy, economic cost potential, and natural resources are difficult to determine from these draft rules. (IASWCD)

Response: The public policy established by these rules is clear. Wetlands and other aquatic resources affected by 327 IAC 2-1.8 and 327 IAC 17 are valuable to the environment and Indiana as a whole, and impacts to these resources shall be avoided whenever possible. If impacts cannot be avoided or minimized, mitigation for adverse impacts must occur so as to insure water quality (biological, chemical and physical) is maintained. These rules have no new implications on land use, economic costs, and natural resources. The draft rules should reduce costs and uncertainty to the general public by providing explicit standards and procedures.

Comment: The draft rules establish a significant public policy with respect to the use of water resources in Indiana. The water supply industry is very dependent on the quality of both surface and ground water and understands the importance of wetland protection in maintaining overall water quality as well as valuable ecosystems and aquatic and riparian habitat. In general the Indianapolis Water Company supports IDEM=s effort to establish standards to protect and maintain wetlands in Indiana. It is not thought that IDEM intentionally drafted these rules to impose restrictions on the use of both ground and surface water resources, but because public water supply utilities activities may result in an impact to wetlands, the rules will have this effect. (IWC)

Response: The Indianapolis Water Company=s support of IDEM=s effort to establish wetland water quality standards is appreciated. The draft rules do not establish an independent permitting program for the withdrawal of water from wetlands. Existing water quality standards could already be interpreted to have this effect.

Comment: Indiana has an abundance of remaining wetlands assessed at eight hundred thirteen thousand (813,000) acres according to an IDNR 1991 study. The stringency of wetland protection afforded by these draft rules is unnecessary with so much wetlands in the state. (IMA, HDI, Nesb)

Response: The estimate of wetland acreage in Indiana has the appearance of being extensive until the following facts revealed by an IDNR study are considered: (1) after the final glacial periods and prior to the settlement of Indiana by Europeans , Indiana contained 5,600,000 acres of wetlands, roughly twenty-four percent (24%) of the surface area of the state; (2) by comparison, the eight hundred thirteen thousand (813,000) acres cover three and a half percent (3.5%) of the surface area of the state; and (3) this is a net loss of eighty-five percent (85%) of Indiana=s original wetlands. These facts place a different perspective on the amount of remaining acres of Indiana wetlands.

Comment: Over the last century, Indiana wetlands have a history of exploitation, abuse, and loss from dredging, draining, and filling. The state agencies charged with the responsibility to protect the state =s wetlands have failed to stem the loss of this once abundant state natural resource. The result is that eighty-seven percent (87%) of the state =s wetlands have been lost. (LCFGP)

Response: Much of the loss of Indiana =s wetlands occurred prior to the development of federal and state laws regulating this resource. These rules will aid in the protection and regulation of these resources and help insure that Indiana =s wetland resources will be healthy and available for future generations of Hoosiers.

Comment: No one cares more than a farmer about preserving natural resources for future generations, but government agencies have already bought thousands of acres of wetlands. There are too many rules and regulations at the state and federal levels that are unclear with no one understanding them not even the people who make them. (Wiehr)

Response: IDEM understands that many farmers have chosen to preserve their wetlands through conservation easements by voluntarily enrolling them in the Wetland Reserve Program under the 1996 Farm Bill. IDEM has worked closely with other state and federal agencies to ensure that all agencies have an understanding of the applicable rules and regulations at both the state and federal levels. In the case of the wetland water quality standards and the Section 401 water quality certification rules, IDEM is available to explain them to any and all who ask. The rulemaking process has been a long one with considerable time given over the past year to public outreach. Numerous workgroup meetings have been conducted in Indianapolis as well as in several regional areas around the state during the development stages of the rules. IDEM will continue to hold these meetings and provide public outreach on the new rules.

Comment: Interest in these rules is not only connected to concern about aquatic resources and the shore birds and wetland birds that use them but also about the quality of water available to the people of Indiana. Many people of northwest Indiana will not drink the water while bottled water sales increase. Agricultural and industrial pollution of drinking water supplies and the decreasing wetlands available for water storage and filtration of these pollutants is compounding the problem of potable water supplies. An eighty-seven percent (87%) loss of wetlands in Indiana has made losing or remediating even a small amount of the remaining land critical and justification for stricter rules favoring strong protection of existing wetlands and high water quality standards. (DCAS)

Response: IDEM shares the concerns expressed in this comment. Over seventy percent (70%) of Indiana =s residents obtain drinking water from ground water, and wetlands provide both ground water recharge and nutrient trapping functions that protect aquifers. The draft rules continue to emphasize protection of wetlands and maintenance of water quality.

Comment: The business of installing subsurface drainage is helpful to water quality. Filtering water through the soil is a cleansing process. By releasing water through subsurface drains slowly, the perched water table is lowered three (3) to four (4) feet. Some rainfall is stored in the drains so there is less runoff to affect water quality. (OKD)

Response: IDEM agrees that soil does filter water, but tiles short-circuit this process by draining the water from the interstitial pores into a tube and out to surface water. Rather than spending days in the soil, water spends minutes which greatly reduces both flood attenuation and filtration.

Comment: In Illinois, water in the ten (10) feet closest to the surface is not considered to be potable and, therefore, is exempt from water quality standards consideration. Applied agricultural chemicals can be filtered by downward percolation resulting in higher water quality in the lower aquifers. It makes no sense to require standards that cannot be met such as requiring water in a perched water table to be pure. (Chas)

Response: The draft rules do not require that water in a perched water table be pure.

Comment: Naturally occurring wetlands, such as Lawrenceburg Oxbow in Dearborn County, Overflow Pond in Harrison County, and Goose Pond in Posey County, are resources that can be very beneficial as wetlands. However, these bodies of water are very badly silted-in and cannot function as a wetland should. Wetlands should be those that support aquatic vegetation, such as reeds, but not very small areas that if designated as wetlands cause farming disruption. The best use of

hydric soils is farming. It makes more sense to properly manage the wetlands we have rather than try to make every mudhole or poorly drained field a wetland. (Chas)

Response: Wetlands, regardless of landscape context or perceived value, are regulated under this rule if they meet the regulatory definition of a wetland as set forth in the rule language. This definition is the same as is used by the Corps of Engineers. Wetlands, even ones where uses may be adversely affected by outside factors, are vital to water quality and are all protected by the standards and criteria set forth in these draft rules.

Comment: There are currently rules in place regarding wetlands. Farmers are aware of wetland issues and have learned to live with the existing rules. Rule changes in the late 1980's and early 1990's involved too many government organizations and brought about law suits because answers were slow in coming and the involved entities differed in their definitions. The result was financial hardship to sellers of farm property and altered investments for others due to refusal of potential buyers to purchase land with a small wet area in a field or because of a broken field tile. (FCS)

Response: All definitions and terms that overlap regulations and definitions from the U.S. Department of Agriculture =s NRCS are identical. IDEM obtained these definitions from regulations promulgated by the NRCS and coordinated the proposed rules with the NRCS to insure accuracy. In addition, this rule has been coordinated with the Environmental Protection Agency, the Corps of Engineers, the U.S. Fish and Wildlife Service, and the Indiana department of natural resources to insure consistency with existing rules. In addition, IDEM has developed a comprehensive outreach program designed to educate all persons on rule requirements and guide people through the process. Programs established under the 1996 Farm Bill are not regulatory but are voluntary. Therefore, NRCS rules do not apply to all farmers. Finally, the federal agencies have entered into a Memorandum of Agreement delineating the responsibilities of the various agencies to improve the timeliness and consistency of their responses with respect to wetlands on agricultural property.

Comment: The AApplicability@ section, 327 IAC 2-1.8-1, should be modified to eliminate the potential conflicts this rule would impose on the withdrawal of water for public supply by including the following: ANotwithstanding other provisions of this rule, the withdrawal of water from surface or ground water sources by a public water supply system, as defined at IC 13-11-2-177, shall not be regulated or prohibited under this rule.@. (IWC)

Response: The water quality standards must be scientifically defensible and are established to protect the public health and welfare, enhance the quality of water, and otherwise meet the goals of the Clean Water Act. These include restoring and maintaining the biological and physical integrity of the nation =s waters. Water is an essential component for wetlands; therefore, it is not appropriate to write specific exemptions into the standards. However, IDEM has no intention of starting a water withdrawal permitting program.

Comment: It is recommended that the draft rule =s applicability be limited to new activities that require certification under Section 401 of the Clean Water Act but not to retroactively impose violations on activities that are presently in operation. These rules should only apply to activities that are intended to adversely impact a wetland, such as intentional discharges to a wetland and intentional modifications to surface or ground water flow to specifically drain or permanently intercept the source of recharge to a wetland, and not unrelated activities that may have some indirect and unintentional effects. (IWC)

Response: IDEM will not take enforcement actions with regard to activities that only become violations after adoption of the new rules.

Comment: The term Awetlands of the state@ is used in 327 IAC 2-1.8-1; however, no definition is provided in the rule for this term. It is suggested the term be replaced with Awaters of the state delineated as a wetland@. (IWC)

Response: IDEM has revised the rule to clarify that it applies to wetlands located within the state of Indiana.

Comment: The definitions of the types of wetlands are too subjective containing generalized judgments that may not result in separate individuals or agencies coming to the same conclusion of what is the type wetland. (AECON)

Response: IDEM disagrees. The definitions of the types of wetlands described in the draft rules were developed in partnership with the IDNR, USEPA, Corps of Engineers, USFWS, and NRCS. The definitions provide clear descriptions that provide distinction among the various wetland types. The draft rules use terms, concepts, and language that makes the definitions consistent with other agencies definitions and criteria.

Comment: Do the indicator species listed in the various wetland type definitions have any regulatory effect as opposed to informational assistance? (SDC)

Response: The indicator species, combined with the other definition components, define wetland types that are regulated under Tier II.

Comment: The definitions in 327 IAC 2-1.8-2 are of the old type, primarily floristic, rather than including a faunal component from the rapid assessment method generated by Grizzle, et al. Glaringly absent is any incorporation of phytoplanktonic or zooplanktonic criteria. Temporally distinct zoological lists should be included. Even a simplistic mix of floristic and faunal assemblages would generate more wetland types than are listed in the definitions of section 2. (Smol)

Response: IDEM disagrees that the definitions are primarily floristic. The floristic component is one (1) of six (6) parameters to be considered in determining what the site must meet to be classified as a particular wetland type. The definitions are primarily abiotic. The definitions are not intended to codify an assessment method such as the one cited. It is a classification more closely related to Cowardin et al. (1979), Branson (1993), and, more specifically, the IDNR Community Abstracts.

Comment: These rules require the delineation of wetlands in several instances. Currently, there is no system in place to ensure that consistent, nonbiased, quality determinations will be rendered by those providing this service. IDEM is urged to support the funding and implementation of the Corps of Engineers Wetland Delineation Certification Program. The Corps of Engineers was authorized in 1986 by the Water Resources Development Act to create and implement the program, but they have thus far not done so. (DCAS, IWL, SCCC, SDCF, VWI)

Response: IDEM has and continues to advocate for a Corps of Engineers Wetland Delineation Certification Program. Persons completing the course would be approved by the Corps of Engineers to perform wetland delineations. This program would establish recognizable credentials for persons working in the wetland delineation field. IDEM supports such a program as reasonable and appropriate.

Comment: The term, Avery slowly flowing@, used in the definition of various wetland types needs further clarification and should specify a maximum current velocity that can be measured. (AECON)

Response: IDEM disagrees. The intent of the definition is to provide a narrative description of water flow through the wetland not a numeric specification. Given the wide variety of wetlands, their placement in the landscape, connection to other waterbodies, and individual flow regimes, it is unreasonable to give a single number or set of numbers to characterize water flow rates.

Comment: When a wetland type definition contains the phrase, Asubstrates are saturated@, does this mean the substrates are saturated at all times? (AECON)

Response: No. The rule language will be changed to reflect frequency of saturation.

Comment: A wetland definition should have a definitive pH that characterizes the wetland type rather than including the nonspecific statement, AWater chemistry is acidic.@. (AECON)

Response: IDEM disagrees. The intent of the definition is to provide a narrative description of the water pH in a given wetland such as a bog not a numeric specification. Given the wide variety of wetlands, their differing substrates, their placement in the landscape, connection to other waterbodies, and individual water chemistry, it is unreasonable to give a

single number which characterizes acid pH. It is appropriate, however, to define pH for specific wetlands as acidic or basic because they differ measurably from streams and rivers.

Comment: The definition of Acircumneutral bog@ at 327 IAC 2-1.8-2(2)(B) needs to include a definition of minerotrophic head. (AECON)

Response: IDEM has revised this portion of the definition for circumneutral bog to read as follows: A(B) Mineral-laden ground water inflow fluctuates with hydrostatic pressure. @

Comment: The definition of Acircumneutral bog@ at 327 IAC 2-1.8-2(2)(F) needs to include a statement of pH difference between deep rooted and shallow rooted vegetation so the difference can be tested. (AECON)

Response: IDEM disagrees. The intent of the definition is to provide a narrative description of the pH in the soil in a circumneutral bog not a numeric specification. Given the fact that soils are not homogenous and pH can fluctuate based on site-specific conditions, it is inappropriate to cite a single number or set of numbers that characterize these differences in pH. It is appropriate, however, to define pH for these soil strata as acidic or basic because it is clearly possible to distinguish acidic conditions from basic conditions.

Comment: A determination concerning nutrient availability needs to be specified and not left to be an issue of judgment. (AECON)

Response: IDEM disagrees. The intent of the definition is to provide a narrative description of the nutrient availability in the soil in a wetland not a numeric specification. Given the fact that soils are not homogenous and nutrient availability can fluctuate based on site-specific conditions, it is inappropriate to cite a single number or set of numbers that characterize these differences in nutrient availability.

Comment: The term Ahigh mineral content@ needs to be defined wherever it occurs. (AECON)

Response: IDEM disagrees. The intent of the definition is to provide a narrative description of the mineral content in the soil in a wetland, not a numeric specification. Given the fact that soils are not homogenous and mineral content can fluctuate based on site-specific conditions, it is inappropriate to cite a single number or set of numbers that characterize these differences in mineral content.

Comment: The definition of Acircumneutral seep@ at 327 IAC 2-1.8-2(3)(E) needs to include definitions of Aorganic@ and Amineral@ as used to describe substrates. (AECON)

Response: These terms are commonly used in the scientific community, and IDEM does not see a need to define them for purposes of this rule. The definitions contained in the NRCS Soil Taxonomy Manual are examples of appropriate definitions for these terms.

Comment: The definition of Acompensatory mitigation@ at 327 IAC 2-1.8-2(5) needs to be improved according to the Council on Environmental Quality =s definition of mitigation as actions that avoid, minimize, reduce, rectify, or compensate for the adverse impacts of development or loss of wetland habitat. The wording Adesignated and existing uses@ used in the definition of Acompensatory mitigation@ seems inappropriate to describe wetland functions because it could easily be misinterpreted as applying only to the aesthetic or human values of wetlands. Although this rule includes a definition each for Adesignated uses@ and Aexisting uses@, those definitions could be improved to something including compensation for physical, chemical, and biological functions lost. (Hasty)

Response: IDEM disagrees. IDEM has defined Acompensatory mitigation@ in the manner stated in the rule because it has a different meaning than Amitigation@. The generic term Amitigation@, as defined by the Council on Environmental Quality, is correct for mitigation as used in the general sense, but it is not appropriate for use in this rule. When the term compensatory mitigation is used, IDEM specifically intends to refer to wetland replacement through the creation or restoration of new wetlands. Other activities listed that refer to avoidance, minimization, reduction, or rectification are not

considered compensatory mitigation in this rule. This definition is consistent with the Corps of Engineers and EPA usage of the term. The draft rules use the definitions of existing use and designated use promulgated by the EPA. The uses as described clearly indicate that biological, chemical and physical properties of wetlands are regulated and protected by the draft rule.

Comment: From the publication, Mitigation: An Introduction, National Wetlands Newsletter, by J. Kusler and H. Groman, the following questions arise that are applicable to these rules and the idea of compensatory mitigation: (1) When should destruction or damage and subsequent creation or restoration be permitted? (2) How will loss or damage to the original system be measured? (3) When is off-site mitigation permitted? and (4) How should agencies respond to scientific and institutional uncertainty? (Hasty)

Response: Answers to each of these questions can be found within the text of the draft rule as noted in the following: (1) When unavoidable (327 IAC 2-1.8-5(b)(1)(A), 327 IAC 2-1.8-5(b)(2)(A)(i), 327 IAC 2-1.8-5(d)(4), 327 IAC 17-5-1(a)(1), and 327 IAC 17-5-1(a)(2)) and uses are replaced (327 IAC 2-1.8-5(b)(1)(D), 327 IAC 2-1.8-5(b)(2)(A), 327 IAC 17-5-1(a)(1)(D), and 327 IAC 17-5-1(a)(2)(D); (2) Damage will be measured by acreage and uses lost, and compensation will mirror these uses (327 IAC 2-1.8-5(b)(1)(D), and 327 IAC 2-1.8-5(b)(2)(A)(iv)(AA)) and acreage as modified by a mitigation ratio (327 IAC 17-4-7); (3) When on-site compensatory mitigation has a low probability of success (327 IAC 17-4-5(b)); and (4) There are an number of tools available to IDEM to deal with scientific and institutional uncertainty, such as up-front mitigation (327 IAC 2-1.8-5(b)(1), 327 IAC2-1.8-5(b)(2)(A)(iv)(AA), and 327 IAC 17-4-8(a)(1)), mitigation ratios (327 IAC 17-4-7), bonding (327 IAC 17-4-8(a)(2)), remediation of failed mitigation (327 IAC 17-4-23), revocation or modification of certification (327 IAC 17-5-2), compliance inspections (327 IAC 17-7-3), and enforcement action (327 IAC 17-7-4).

Comment: The definition of Acontrol document@ found at 327 IAC 2-1.8-2(6) is unnecessary as the term is not found anywhere within the rules published in the Indiana Register second notice of #99-58(WPCB). (IMA)

Response: IDEM agrees and has removed the definition.

Comment: The definition of Acontrol document@ is too broad, and it does not mirror the term, as used in other water quality rules, where it does not include an industrial pretreatment permit, a record of decision, a commissioner =s order, an agreed order, or a consent decree. (IEU, SIGECO)

Response: IDEM agrees and has removed the definition.

Comment: The term Acontrol document@ needs to include required best management practices. (SDC)

Response: IDEM has removed the definition since it is not used in the rule.

Comment: The definition of Acypress swamp@ at 327 IAC 2-1.8-2(7)(A)(iii) needs to include a list or state where such list of the major tributaries to the Ohio and Wabash Rivers can be found and describe what defines a tributary as being major. (AECON)

Response: IDEM disagrees. The definition is intended to provide a general geographic region where this wetland type may be present not depict specific locations.

Comment: The definition of Acypress swamp@ at 327 IAC 2-1.8-2(7)(E) needs to include definitions of Apoorly drained and aerated soils@ and Apeat@. (AECON)

Response: These terms are commonly used in the scientific community, and IDEM does not see a need to define them for purposes of this rule. The definitions contained in the NRCS Soil Taxonomy Manual are examples of appropriate definitions for these terms. IDEM has removed the term Apoorly aerated@ from this definition and other definitions.

Comment: It would be helpful in understanding the definition Acypress swamp@ if an example would be provided of an

instance where a bald cypress *(Taxiodium distichum)* is not present in a cypress swamp. The definitions in 327 IAC 2-1.8-2 of the various types of wetlands often state that a type of vegetation may be present. This vagueness could be corrected with wording such as A...means a wetland that typically includes.... @. (IDOT)

Response: IDEM agrees and has changed the draft rule.

Comment: The term Acarbonate rich @ needs to be defined so that it could be measured relative to water chemistry. (AECON)

Response: IDEM disagrees. The intent of the definition is to provide a narrative description of carbonate levels in the soil in a wetland not a numeric specification. Given the fact that soils are not homogenous and carbonate levels can fluctuate based on site-specific conditions, it is inappropriate to cite a single number or set of numbers that characterize these differences in carbonate levels.

Comment: The definition of Adune and swale @ at 327 IAC 2-1.8-2(9)(E) needs to include a definition of Awet calcareous sand@. (AECON)

Response: IDEM has modified the draft rule to define Acalcareous sand @ as follows: ACalcareous sand @ means a soil that is less than ten percent (10%) clay and more than eighty-five percent (85%) sand and effervesces with cold ten percent (10%) hydrochloric acid. @

Comment: From the viewpoint of a trained botanist with considerable experience in northwest Indiana =s dune country, the definition of Adune and swale @ at 327 IAC 2-1.8-2(9) and its included species list is much too narrow. The definition contained in the draft rule would be fine for dune and swale very close (within one quarter mile) of Lake Michigan, where the following of your listed indicators: (1) sea rocket; (2) dune thistle; (3) seaside spurge; (40 beach pea; (5) dune willow; and (6) dune goldenrod; are restricted. However, there is too much valuable dune and swale inland of this area, including Gibson Woods State Nature Preserve, that would be excluded from the draft rule definition. Further inland from Lake Michigan as the classic dune and swale runs out, there is then the older lake plain-sand spit geology with gentle dune ridges and broad expanses of high quality, ground water fed, often fen-like, wet prairie wetland. Examples are found at Oak Ridge Prairie County Park and the famous Hoosier Prairie State Nature Preserve, a national natural landmark. These are two (2) very valuable and diverse dune land habitats; each place has over five hundred (500) native plant species including many state listed ones. In summary, the draft rule definition of Adune and swale @ should be broadened to include all the classic dune and swale, and the special habitats that are defined in 327 IAC 2-1.8-2 should include a definition for Aground water fed wet prairie@. (IWL, SCDG, SDCF)

Response: The indicator species used in the Adune and swale @ definition were taken from Swink and Wilhelm (1994) and the IDNR Community Abstracts. The definitions with species lists were presented to several Indiana botanists. IDEM incorporated the opinions of these experts into the draft rule language. IDEM also presented the definitions to the workgroup during development of the draft rule. The six (6) species at issue may not be found on every dune and swale. There are thirty (30) species listed in the definition, only one (1) must be present on the site (in combination with the other parameters) to call the site a dune and swale.

Comment: The use of the term Asand dune @ in the definition of Adune and swale @ is redundant. A dune is a sand hill. Some scientific documents replace Adune and swale @ with Aridge and swale@. (SDC)

Response: IDEM has modified the language in the definition to read as follows: A(A) Sand hills divided by low lying areas referred to as swales ....@

Comment: The definition of Afrequency@ at 327 IAC 2-1.8-2(13) explains what the term means but does not provide the actual frequency that determines if an area is or is not a wetland. (IDOT)

Response: The term Afrequency@ is taken directly from the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual. The draft rule has been revised to indicate that this manual is the standard methodology for the determination of

wetland areas as defined in this rule. Therefore, terms such as these are defined in greater detail in the aforementioned document and do not need to be further defined in the rule.

Comment: The definition of Amarl@ at 327 IAC 2-1.8-2(17) needs to specify a range of percentage of composition of each material. (AECON)

Response: IDEM disagrees. IDEM has consulted with the Natural Resources Conservation Service in the development of this definition. As marl is not uniform in its composition, it is unreasonable to assign fixed percentages to the materials which comprise a typical marl soil. The definition cited is generally accepted by soil scientists.

Comment: The definition of Apracticable alternative @ at 327 IAC 2-1.8-2(20) is too inaccurate. It needs to be reconsidered because even if an alternative is practicable, it may not be prudent due to other reasons. (IDOT, NiS)

Response: IDEM has modified the definition to reflect the definition used in the 404(b)(1) guideline, that is used by the Corps of Engineers and USEPA. IDEM believes it is a reasonable definition.

Comment: The definition of Aprevalent vegetation @ at 327 IAC 2-1.8-2(21) explains what the term means but does not reference the appropriate list of species. (IDOT)

Response: IDEM has removed this definition from the rule because the term is not in the current draft.

Comment: The wetland water quality standards at 327 IAC 2-1.8-2 contain no definitions of the terms Arestoration@ and Arehabilitation @. ARehabilitation @, as defined at 327 IAC 17-1-4(20), is insufficient to replace restoration. Remediation of factors causing degradation of a wetland does not necessarily result in the successful restoration of that wetland. Rehabilitation alone is unacceptable as compensatory mitigation unless an improved definition is provided in these rules. The rules need to include the term Arehabilitation @ with Arestoration@ and provide a definition of Arestoration@. (DCAS, GIW, IWL, SCCC, SDCF, VWI)

Response: IDEM agrees and has made changes to the draft rule. However, Arehabilitation @ will remain a separate term because of the specific criteria placed on wetland mitigation projects that propose to use this technique to offset certified impacts.

Comment: The wetland water quality standards need to include a definition for Aendangered species @ since both Arare@ and Athreatened or endangered species @ have independent definitions. (SDC)

Response: IDEM has revised the definition of Athreatened or endangered species @ by splitting it into separate definitions. The draft rule no longer applies to rare species because the provisions that previously pertained to Outstanding State Resource Waters (OSRW) have been removed from this draft rule. The criteria for designating wetlands as OSRWs and the corresponding antidegradation implementation procedures will be developed under the rulemaking that will be done to implement SEA 431.

Comment: It is recommended that the definition of Athreatened or endangered species @ at 327 IAC 2-1.8-2(27) be modified by the elimination of the words Aor endangered@ because IC 14-22-34 pertains to endangered species. The draft rule does not provide information for obtaining copies of the state listed species. The Indiana species list is found in administrative code that is subject to revision; therefore, it is recommended that the rule reference the Indiana department of natural resources (IDNR) as the source for obtaining copies of the Indiana species list. (IDNR)

Response: IDEM has revised the definition of Athreatened or endangered species @ by splitting it into separate definitions. IDEM has included a citation to IDNR regulations.

Comment: The definition of Asaturated soil condition @ at 327 IAC 2-1.8-2(24) needs to describe what is the root zone and provide a depth or type of plant to be considered so that depth can be known. (AECON)

Response: IDEM disagrees. The term Asaturated soil condition @ is taken directly from the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual. The rule has been revised to indicate that this manual is the standard methodology for the determination of wetland areas as defined in this rule. Therefore, terms such as these are defined in greater detail in the aforementioned document and do not need to be further defined in the rule.

Comment: The term Aqualified expert @ used in 327 IAC 2-1.8-4(2)(A) needs to be defined. (AECON, IDOT)

Response: IDEM has modified the draft rule language to remove the term Aqualified expert@. The modified draft rule language reads as follows: AIf the Indiana department of natural resources determines that the wetland does not contain suitable habitat to support the threatened or endangered species, then the wetland is not a Tier II wetland. @

Comment: The statutory definition of Awaters of the state@ is included in rule 1.8 though the term is not used anywhere in the rule. The draft rule as written applies to private waters such as farm ponds; however, these surface waters are excluded under the definition of Awaters of the state@. Therefore, if wetlands are Awaters of the state@, farm ponds should not be regulated by these wetland rules. (IMA)

Response: AWaters of the state@ is part of the definition of Acompensatory mitigation @ at 327 IAC 2-1.8-2(5) in the wetland water quality standards rule and is used throughout Article 17. Wetlands are waters of the state, and the state =s water quality standards have always been applied to them. If the waterbody is considered to be a wetland for purposes of Section 404 of the Clean Water Act, then IDEM will regulate it under these rules. If the waterbody falls under an exemption at 404(f) of the Clean Water Act, then a Section 401 Water Quality Certification will not be required. If IDEM decided not to apply state water quality standards to wetlands within Indiana, EPA would promulgate water quality standards that would apply to them.

Comment: The statutory definition of Awaters of the state@ included in the draft rule at 327 IAC 2-1.8-2(28) excludes private ponds from regulation. It is recommended that a maximum size criteria, such as not greater than one-quarter acre, be applied to unregulated private ponds. Larger ponds can hold significant wildlife and have flood control and clean water benefits that make the pond important enough to be regulated. (IWL, SCDG, SDCF)

Response: At this time, the determination of what constitutes a private pond will be made on an individual, fact-specific basis. Although IDEM agrees that private ponds can provide significant benefits, IDEM does not believe that it would be appropriate to set a size limit on the regulation of private ponds. However, the size of the water body may be a factor in determining whether the water body is, in fact, a pond.

Comment: EPA provides for the use of natural wetlands and wetlands constructed in natural settings to be used for wastewater treatment according to the publication, AConstructed Wetlands and Aquatic Plant Systems for Municipal Wastewater Treatment@, (1991), if the wetland is isolated from other surface waters. The Indiana statutory definition of Awaters of the state@ in excluding Aan off-stream pond, reservoir, or facility built for reduction or control of pollution or cooling water before discharge @ distinguishes certain natural wetlands as suitable treatment facilities. On the basis of these two (2) sources, an off-stream wetland could be utilized as a treatment facility provided that it does not contribute pollution to the waters of the state. Apparently, just such a wetland is being proposed to purify leachate from the Monroe County landfill according to an article in the Herald Times dated January 7, 2000. Therefore, it is recommended that wetlands used as treatment facilities, regardless of being constructed or natural, need to be regulated under these rules in the event that the wetlands do contribute to waters of the state. (IFW)

Response: IDEM disagrees. The statutory definition of Awaters of the state@ in no way indicates or designates that certain natural wetlands may be used for water treatment. The definition refers only to an off-stream pond, reservoir, or facility built for reduction or control of pollution or cooling water before discharge as exempt waters. Therefore, it is against state law to use a natural wetland, either connected to, adjacent to, or isolated from another waterbody, as a pollution control structure, regardless of whether it would contribute pollution to other waters. Wetlands are protected waters of the state. These draft rules do not regulate wetlands that have been constructed and engineered for the sole purpose of water pollution control. These draft rules are specific to natural wetlands and are to protect, as required by federal law, natural wetlands from being used as pollution control structures. Even if EPA were to contemplate this scenario, the disclaimer on page ii of the cited document states that Athis document is not intended to be guidance or support for a specific regulatory

program.@.

Comment: The definition of Awetland@ at 327 IAC 2-1.8-2(29) needs to specify which waters are required to meet the standard at all times. Those wetlands delineated as Ajurisdictional wetlands @ are the ones subject to Section 401 water quality certification approval, but the definition of a Ajurisdictional wetland @ is less critical than the Indiana definition for a water quality standard because professionals will decide during a construction project and then take specific practical actions to move forward with the conditions of a Section 401 water quality certification. (IDOT, IEU, IMA, SIGECO)

Response: The definition of wetland set forth in the draft rule is the same as will be used to determine if the wetland is a Ajurisdictional wetland @ (for example, subject to regulation by the Corps of Engineers). Any area that meets the definition =s criteria is regulated under the terms of both proposed rules.

Comment: The definition of Awetland@ needs to exclude wetlands that have been compromised from their original condition and are not a fully functional wetland but may meet the very broad definition of the draft rule. The draft rule needs to make a distinction for wetlands that have been constructed for remediation or banking purposes; they should be addressed in an alternative manner in this draft rule. (IEI)

Response: IDEM disagrees. The intent of the draft rule is to regulate all wetlands that meet the definition set forth in the rule regardless of possible previous impacts to them. Wetlands that are constructed for the sole purpose of treating pollution, either point or non-point, are exempt from the water quality standards. All other wetlands, regardless of intended function or ownership, are regulated under this rule. Again, the definition of wetland set forth in the draft rule is the same definition that the Corps of Engineers will use to determine whether the wetland is covered under section 404 of the Clean Water Act.

Comment: The Awetland@ definition at 327 IAC 2-1.8-2(29) needs to clarify if artificial, man made wetlands such as those created as a pollutant trap associated with urban storm water runoff, vegetative filter strips developed for agricultural pollution capture, ponds and lakes, broken agricultural field tiles not promptly repaired, prior converted wetlands, or farmed wetlands fall with the definition. (IASWCD)

Response: IDEM disagrees. There is no need to modify the existing definition as it clearly indicates what is and is not a wetland. Any area that meets the definition =s criteria is regulated under the terms of this rule unless it is exempt from the water quality standards because it was constructed for and serves as a pollution control structure.

Comment: The Awetland@ definition at 327 IAC 2-1.8-2(29) needs to define the term with respect to three (3) dimensions so that the point of standards application within the wetland is distinguishable between where the ground water quality standards and the surface water quality standards apply. (IWC)

Response: The definition of wetland at 327 IAC 2-1.8-2(29) is the same definition that is used by the Corps of Engineers and EPA. IDEM does not believe it is appropriate to have a definition of Awetland@ for purposes of determining the Corps and EPA=s authority and another for purposes of determining the state =s jurisdiction.

Comment: The Awetland@ definition at 327 IAC 2-1.8-2(29) does not reference hydric soils as a criteria. Is IDEM adopting the Corps of Engineers definition of Awetland@ or creating its own interpretation? The draft rule needs to include a single, clear definition of wetland according to the Corps of Engineers Wetland Delineation Manual to avoid conflicts. If the definition used in the draft rule is unique to IDEM, please clarify: (1) Afrequency and duration@; (2) Asignificant to support@; (3) Aprevalence@; and (4) provide a list of species of plants believed to be wetland plants. (IDOT)

Response: The definition in the draft rule is the same as is used by the Corps of Engineers. IDEM is adding clarifying language to the definition specifying that the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual will be used to determine whether an area is a jurisdictional wetland.

Comment: The term Aconstructed wetland@ has been entirely struck from these draft rules though it was contained in an earlier version dated March 12, 1999. At an external workgroup meeting for these draft rules, the reason given for omitting

constructed wetlands from regulation under these rules was that they are treatment facilities and not considered waters of the state and if abandoned will not become jurisdictional waters of the United States unless built in a jurisdictional water in which case it would become the responsibility of the Corps of Engineers to determine if the constructed wetland is abandoned. These justifications are not convincing because no consideration is given to regulation of wetlands that are constructed in upland areas for the treatment of nonpoint source pollution but were later abandoned. If a constructed wetland functions naturally without maintenance, the differences between it and a natural wetland will be obliterated over time and should be regulated under these rules. It is recommended that the draft rule contain a definition of Aconstructed wetland @ to mean a wetland that may be designed to collect water from a nonpoint source as well as from a point source. The rules need a definition of Anatural wetland @ to distinguish it from a constructed wetland. (IFW)

Response: IDEM disagrees. As discussed in the rule workgroup meetings, constructed wetlands built for control of point sources of pollution are treatment facilities and are, therefore, not considered Awaters of the United States @. Also, these systems, even if abandoned, will not become jurisdictional Awaters of the United States @ according to the Army Corps of Engineers (Corps). Therefore, including a definition of constructed wetlands is unnecessary. Constructed wetlands built for non-point source pollution purposes are not regulated under Section 401 when the facility is built in upland areas (non Awaters of the United States @). However, construction of this type facility in a jurisdictional water would require the issuance of a Corps Section 404 permit and an IDEM Section 401 Water Quality Certification (WQC). IDEM would take jurisdiction over facilities constructed in upland areas only when the Corps determines the area has become a water of the United States and asserts jurisdiction. The Corps would have the sole responsibility for determining when constructed wetlands have become abandoned and have reverted to a Awater of the United States @. Presently, the Corps has no guidance for determining at what point these systems become jurisdictional, though the Corps has stated that an area is considered abandoned when it no longer performs or provides its constructed function. If a non-point source constructed wetland facility is maintained properly to perform its intended constructed functions, then the facility should not be considered abandoned.

Comment: The draft rule should include a definition of Aoff-stream wetland@ to mean a wetland used for reduction or control of pollution. The definition should make clear that in any wetland that overflows the outlet must be defined well enough that water can be sampled for contaminants at that location before the water enters the waters of the state. Inclusion of wetlands into the category of off-stream ponds, reservoirs, or facilities may seem inappropriate until one realizes nearly all ponds and reservoirs particularly those draining agricultural fields will fill with sediment and evolve into wetlands unless they are dredged regularly to maintain them as ponds or reservoirs. Definitions of Aponds@ and Areservoirs@ relative to wetlands should also be included in the draft rules. Additionally, since there is no ruling as to whether or not abandoned off-stream ponds and reservoirs can become jurisdictional wetlands, there should also be a definition of wetlands whose waters are continuous with those of the state and nation such as wetlands that border streams, rivers, and lakes. (IFW)

Response: IDEM disagrees. There is no need to modify the existing definition as it clearly indicates what is and is not a wetland. Any area that meets the definition =s criteria is regulated under the terms of this draft rule, unless it is exempt from the water quality standards because it was constructed for and serves as a pollution control structure.

Comment: Wetland designated uses described in 327 IAC 2-1.8-3 are unnecessarily broad. According to the 1987 Corps of Engineers Wetlands Manual, the threshold criterion for wetland hydrology is saturation to the surface for at least five percent (5%) of the growing season; thus, under this definition, wetland habitat would not actually be available for some of the designated uses included in the draft rule. All of the aquatic organism listed in subdivision (1) should be deleted as designated wetland uses. The uses listed in 327 IAC 2-1.8-3(5) should be deleted because they could only exist if the public has access to a wetland and do not apply to privately owned wetlands. Furthermore, designated uses such as Ascientific @ and Aeducational @ are inappropriate for any wetland because these terms are undefined, unrelated to water quality, and are not part of the federal program elements for designated uses. (AEP, ICC, IEI, IEU, IMA, SIGECO)

Response: Even though a given wetland may only be saturated for five percent (5%) of the growing season, this does not preclude the wetland from providing wetland habitat. In fact, some wetland species are dependent on these fluctuating hydrologic conditions. IDEM has modified the designated uses regarding aquatic organisms. In addition, IDEM has removed Ascientific @ and Aeducational @ as designated uses because these uses are captured in the remaining designated uses. The uses listed in 327 IAC 2-1.8-3(5) apply even if the public does not have access to the wetland.

Comment: The wetland designated uses in 327 IAC 2-1.8-3 are unclear. Does a typical forested wetland ever support fish or mollusks? (IDOT)

Response: In some cases, flood plain forests, such as cypress swamps, do support habitat for fish and some mollusks.

Comment: A wetland should not hold a greater value than other uses of a water resource, such as those defined at 327 IAC 2-1-3(3) and proposed at 327 IAC 2-11; yet, the designated uses of 327 IAC 2-1.8-3 can be interpreted so that wetland designated uses supercede the designated uses of the hydrologic system supporting the wetland. The requirement to maintain the designated use of a wetland, specifically the hydrologic factors listed in 327 IAC 2-1.8-3(4), may prohibit or limit the use of ground water and surface water. It is suggested to eliminate the superposition of water uses with the addition of a subsection in 327 IAC 2-1.8-3 limiting the requirement to maintain the designated uses listed in this section if they prohibit or significantly limit use of the water as designated under other rules. (IWC)

Response: The designated uses set forth for wetlands do not supersede the designated uses for other waters. The designated uses for wetlands and other water systems will have to be interpreted as harmoniously as possible to support the designated uses of both systems to the maximum extent possible.

Comment: An important function of a wetland is to act as a natural water filter, but this is not listed as a designated use in 327 IAC 2-1.8-3. Surface runoff from farming activities can find its way into a wetland and will largely determine the water quality of the wetland. However, it is difficult to apply wetland water quality standards for all properly functioning wetlands, and IDEM seems to allude to this difficulty by including eleven (11) different wetland types. (IFB)

Response: The Clean Water Act does not allow the designation of wetlands or water bodies as pollution control structures or permit water bodies to be used to treat pollution, either non-point or from a point source. Although wetlands naturally remove nutrients and trap sediments, IDEM would not propose that treatment or filtration of pollutants from water is an appropriate designated use.

Comment: An earlier version of the rule had a subsection (b) at 327 IAC 2-1.8-3 that concerned regulating storm water control. This is an essential element to prevent degradation of wetlands and should be reinserted in the wetland water quality standards. (IFW)

Response: The provision that was formerly in subsection (b) at 327 IAC 2-1.8-3 is now found at

327 IAC 17-4-9.

Comment: There is reason for concern regarding the draft rule =s approach to classification of wetlands in section 4 because, in general, not that much is known about the habitat for endangered species, especially specific habitat needed for their survival, which is one (1) reason why a species becomes endangered. An endangered species not using a particular wetland at a given time does not preclude the species from using that wetland in the future nor the wetland from being enhanced to provide recovery of the endangered species in that area. AQualified experts@, whomever they may be, do not have the legislatively designated responsibility for the protection and management of wildlife in Indiana; that is the responsibility of the IDNR, Division of Fish and Wildlife, who through the Heritage Database would have documentation of the existence of a threatened or endangered species in a particular wetland. A wetland where the database documents the existence of a threatened or endangered species should be a Tier II wetland with the only exception to this being allowed by the rule after consultation with and concurrence of IDNR. (IDNR, Smol)

Response: IDEM has modified the draft rule language to remove the term Aqualified expert.@ The modified draft rule language reads as follows: AIf the Indiana department of natural resources determines that the wetland does not contain suitable habitat to support the threatened or endangered species, then the wetland is not a Tier II wetland. @. IDEM does and will continue to consult directly with the Indiana department of natural resources on these issues because it has statutory responsibility to protect these species and the expertise to decide on the potential effect of projects may affect wetlands and listed species.

Comment: These wetland rules are generally defective due to assuming static conditions; when in fact, temporal factors affect the apparent utility, quality, biodiversity, and hydrology in an as yet indeterminant way. Classification and utility of a point wetland or wetland system cannot be assessed from a single quality assessment or single inventory. Wetland classification needs to include the existence of meta-populations, both faunal and floristic. Research through severe conditions such as drought and the aftermath of fish kill events implies that a single point wetland needs to be evaluated in the light of the system in which it exists and not as an isolated entity. For example, in the dune and swale region of northern Indiana, the varying hydrology leads to significant alterations of individual wetlands from year to year within a greater system. These changes would select organisms that would survive by meta-populational dynamics. (Smol)

Response: These concerns are understood by IDEM; however, it would be nearly impossible to incorporate all of these concerns in the draft rules. The draft rules attempt to recognize these concerns by referring to Anatural variations@ and Aregimes@ and not to static conditions (327 IAC 2-1.8-6(b)), implying that conditions do change.

Comment: The rules are making a mistake by linking Tier II designation too closely to endangered or threatened species. It is not the species that determines the ecotype, but the ecotype that determines the species. When an endangered life form is in need of saving, it is because the ecotype has been threatened; the species is merely the indicator of trouble. Therefore, it is recommended that the classification of wetlands need to focus on an inventory of endangered ecotypes in order to avoid cascading endangerment of many species. (Smol)

Response: The draft rule currently addresses the idea of Aendangered ecotypes@. Wetland types that will be considered Tier II wetlands are listed. Areas used by a species constitutes that species =habitat. The use of an area by a listed species indicates the area is important. Mitigating for the loss of a population of listed species is exceptionally hard and may be impossible. Relocating some species to the new area might be possible but only if suitable areas are available. This is precisely the reason IDEM has included these areas in Tier II.

Comment: The classification scheme in 327 IAC 2-1.8-4 is too rigid. Tier I wetlands can have a range from the lowest quality *Phragmites* or purple loosestrife-cattail monoculture to high quality wetlands that are quite pristine but do not fit into any of the Tier II descriptions. Tier II descriptions are weighted toward extremely rare habitats with many of the indicator plant species listed being those that are endangered and threatened. Wetlands that are quite pristine and have good biological diversity of plants and wildlife truly should get better protection. As well, wetlands that were pristine and diverse but have recently become overrun with exotic species, such as glossy buckthorn or *Phragmites*, and with some work could be restored to high quality should also get better protection than Tier I wetlands because of their existing seed banks and ground water fed hydrology that must be preserved in nature. High quality Tier I wetlands and almost all Tier II wetlands are so biologically complex that they absolutely cannot be recreated. They should not be thought of as mitigatable, and these rules should reflect that fact better. (IWL, SCDG, SDCF)

Response: The Tier II definition was designed, in part, to encompass irreplaceable wetland community types or provide protection where there is little or no evidence that mitigation can be successfully accomplished. Since mitigation would likely fail in these cases, the rule requires up-front mitigation for all Tier II impacts. Note that 327 IAC2-1.8-5(b)(1)(D) allows for up-front mitigation for Tier I wetlands when necessary. IDEM has undertaken a long-term study of wetland mitigation. IDEM anticipates this study will illuminate wetland types that are not replaceable and methods that yield the best results.

Comment: A Tier I wetland according to 327 IAC 2-1.8-4 includes too much. It is recommended that a Tier I wetland specifically exclude artificially created wetlands or that compensatory mitigation not be required for impacts to wetlands created as a result of an unrelated activity. (IWC)

Response: If a water body fits the definition of wetland, then it will be regulated as a water of the United States. Numerous court decisions have held that it is irrelevant whether the wetland was created naturally or inadvertently. However, wetlands that are created and maintained for the purpose of wastewater treatment will not be considered wetlands and, thus, will not be subject to regulation under this rule.

Comment: Despite subdivisions 327 IAC 2-1.8-4(1) and (2), it is still difficult to distinguish between a Tier I and a Tier II wetland. Who has identified and what are Awetland-dependent@ species as used in 327 IAC 2-1.8-4(2)? (IDOT)

Response: IDEM has developed a definition for wetland-dependent species after extensive consultation with USFWS and IDNR. In addition to the definition, the rule includes a list of threatened and endangered species that meets the terms of the definition. This list was provided by the IDNR.

Comment: Wetland water quality standards should be based on issues of water quality and not the proximity of a threatened or endangered species. If such species is migratory and not present at times on the wetland, does the classification of the wetland change when the species has left the wetland? If a species of concern is officially delisted, is there a mechanism to change a wetland =s status from Tier II to Tier I? (IFB)

Response: IDEM has developed a definition for wetland-dependent species after extensive consultation with USFWS and IDNR. In addition to the definition, the rule includes a list of threatened and endangered species that meets the terms of the definition. This list was provided by the IDNR. Migratory species are not included in this list if the species only utilizes wetlands during migration. If a species were to be officially delisted, the wetland in question would no longer be considered a Tier II wetland as it would not meet the criteria listed in the draft rule.

Comment: A wetland displaying highly significant or uniquely important uses aside from threatened or endangered species habitat should also qualify as a Tier II wetland. (DCAS, HEC, IWL, SCCC, SDCF, Smol, VWI)

Response: IDEM is not clear what highly significant or uniquely important uses is being referenced. IDEM has attempted to identify significant and unique wetland types and those that are of importance to threatened or endangered species for special protection under the Tier II category.

Comment: All uses and functions of a wetland need to be considered in determining its value under the water quality certification process. The EPA wetland study entitled, Northwest Indiana Advance Identification of Wetlands, ranked some wetlands high because they provide excellent habitat for wildlife, some because of their value in flood control, and others because of their value in water purification. Two (2) of the most valuable functions of wetlands, water purification and flood control, have been omitted in the draft rule even though they were included in a prior version of the rule and have been discussed in the IDEM brochure, AProtecting Indiana =s Water Resources@. The reason given for the exclusion was that inclusion might be assumed to be a legitimate basis for using natural wetlands to remediate intentional releases of toxic materials or flood waters into wetlands. Acknowledging all of the valuable functions that wetlands perform and providing the regulation needed to prevent abuse of them would be a better approach than ignoring any of the functions. (IFW)

Response: While it is not appropriate for IDEM to designate uses for wetlands such as water purification and flood control, these may be considered existing uses of wetlands and are protected by the draft rules. Existing uses of wetlands are specifically protected at 327 IAC 2-1.8-5. However, in no case should a water of the state, including wetlands, be used as a treatment facility or for the treatment of any pollution. Federal regulations prohibit IDEM from designating waste transport or waste assimilation as a use for any waters of the United States (40 CFR Part 131.10).

Comment: The classifications provided by 327 IAC 2-1.8-4 lack clarity. The draft wetland water quality standards do not define nor include in the wetland definition the terms Afarmed wetland@ or Aforested wetlands@. Definitions for these terms are incorporated in the water quality certification rules but are not used in the wetland water quality standards; therefore, it is unclear whether farmed wetlands or forested wetlands are intended to be included in the standards rule. (HDI, IFB, NI, OKD, Wiehr)

Response: Farmed wetlands and forested wetlands are types of wetlands defined in 327 IAC 17. For the purposes of the wetland water quality standards (327 IAC 2-1.8), all wetlands, regardless of classification or type, are protected by the draft standards. These terms are not used in the wetland water quality standards and, therefore, do not need to be defined in this draft rule. These terms are defined in 327 IAC 17 because there are specific criteria established in this rule that determine how IDEM will regulate these areas when reviewing a Section 401 Water Quality Certification application.

Comment: 327 IAC 2-1.8-4(2)(B) says a wetland is Tier II if it is within one-half (0.5) mile radius of a wetland-dependent species. There are other habitats that some wetland-dependent species need. If that site selected as the wetland

replacement site fails, the entire local population of that species is in trouble. (IDOT)

Response: The draft rule provides clear protection for such a situation by requiring that mitigation for Tier II wetlands be completed and demonstrated to be successful before any impacts are allowed to be caused to the wetland. This insures that the critical habitat for the listed species is present and functional and eliminates the risk of habitat loss and species population declines.

Comment: 327 IAC 2-1.8-4(2)(A) is redundant of clause (B) and should be removed from the draft rule. (JFN, NiS)

Response: The two clauses are not redundant. Clause (A) provides that a wetland will be a Tier II wetland if the presence of a wetland-dependent threatened or endangered species has been documented in the wetland. Clause (B) applies when the wetland is located within a one-half (0.5) mile radius of a site where the presence of a wetland-dependent threatened or endangered species has been documented.

Comment: The classification scheme presented in 327 IAC 2-1.8-4 segregates wetlands by sensitivity to disturbance, rarity, and replacement potential. Has a process been conducted to identify, determine, delineate, and inventory the wetlands of Indiana? Where is such information available to citizens? (IASWCD, NI)

Response: IDEM is working through the Indiana Wetland Conservation Plan Technical Advisory Team to develop plans for a wetland inventory project. Once a comprehensive inventory is completed as a multi-agency project, this inventory will be available through print and electronic formats.

Comment: If a particular wetland fails to meet the proposed wetland water quality standards, is it then determined to be impaired as defined by the Clean Water Act? (OKD)

Response: If a particular wetland would fail to support designated uses or meet criteria set forth in the wetland water quality standards, then the wetland would be considered to be impaired.

Comment: At 327 IAC 2-1.8-4(2)(A) the language concerning qualifications of a Tier II wetland includes reference to IDNR=s documentation of the presence of wetland-dependent, threatened or endangered species, presumably through the Indiana Heritage database maintained by the Division of Nature Preserves, and to a Aqualified expert@ who must submit a demonstration to the department in order to have a wetland not be considered a Tier II wetland because it does not contain suitable habitat to support the threatened or endangered species. The rule needs to clearly designate whether the referenced Adepartment@ is IDNR or IDEM and who is considered a qualified expert. (IDNR)

Response: IDEM has modified the draft rule language to remove the term Aqualified expert.@ The modified draft rule language reads as follows: AIf the Indiana department of natural resources determines that the wetland does not contain suitable habitat to support the threatened or endangered species, then the wetland is not a Tier II wetland.@ IDEM does and will continue to consult directly with the Indiana department of natural resources on these issues because they have statutory responsibility to protect these species and the expertise to decide on the potential effect of projects that may affect wetlands and listed species.

Comment: In addition to the rule needing to include a definition of a Aqualified expert@, the provision allowing an applicant to use a Aqualified expert@ to demonstrate that a wetland does not have threatened and endangered species habitat is subjective and ill defined. Any demonstration of an absence of a species documented to exist by IDNR must be reviewed and approved by IDNR before the demonstration is accepted. (DCAS, GIW, HEC, IWL, SCCC, SDC, SDCF, VWI)

Response: IDEM has modified the draft rule language to remove the term Aqualified expert.@ The modified draft rule language reads as follows: AIf the Indiana department of natural resources determines that the wetland does not contain suitable habitat to support the threatened or endangered species, then the wetland is not a Tier II wetland.@ IDEM does and will continue to consult directly with the Indiana department of natural resources on these issues because they have statutory responsibility to protect these species and the expertise to decide on the potential effect of projects that may

affect wetlands and listed species.

Comment: The qualifications of a Tier II wetland in 327 IAC 2-1.8-4(2)(A) are not scientifically based, duplicative of protection afforded by other state agencies, and broader than necessary to protect endangered species. Wetland quality should be based on a combination of features and not solely on the presence of a single, arbitrarily determined species. Many species listed as endangered on the state =s list are common elsewhere but on the edge of their range in Indiana, do not necessarily need high quality wetlands, and can sometimes be found in disturbed wetlands. The draft rule misuses the state=s list of endangered species, the intended purpose of which is to be administered by the Natural Resource Commission and the Indiana department of natural resources. If the state wishes to provide additional protection to these endangered species, it should be accomplished through the legislative process not under federal Clean Water Act legislative mechanisms. (AEP, ICC, IEU, IMA, NiS, SIGECO)

Response: IDEM disagrees. IDEM is well within its authority to protect wetland areas that may provide habitat for threatened or endangered species. IDEM has worked closely with the IDNR and the USFWS to determine species that are dependent on wetlands for part or all of their life cycle and establish criteria that maintain the physical, chemical, and biological properties of the wetland in conformance with the water quality standards. IDNR and the Natural Resources Commission are not solely responsible for protecting endangered and threatened species, Indiana Code specifies the following at IC 14-22-34-14 (c) concerning nongame and endangered species conservation: A(c) The governor shall do the following:

> (1) Review other programs administered by the governor and, to the extent practicable, use the programs to further the purposes of this chapter.
>
> (2) Encourage other state and federal agencies to use their authorities to further the purposes of this chapter.@

Comment: As an alternative to protecting Indiana listed threatened or endangered species by designating their habitat as Tier II, the commissioner could make individual determinations that a specific wetland has unique flora or fauna that warrants the additional protections of Tier II wetlands. Such a determination should be supported by a public record of decision with notices to property owners, interested parties, and adjacent property owners, and should be subject to appeal by an affected party. (IEU, SIGECO)

Response: In some respects, individual determinations that specific wetlands have unique flora or fauna are essentially being made by designating unique wetland types as Tier II wetlands; this is also true of wetlands that are designated as Tier II because of the presence of an endangered or threatened species. IDEM will only be making the determination as to whether a particular wetland is a Tier II wetland if the property owner wishes to impact the wetland. Notice of the application for Section 401 water quality certification would be published with an opportunity to comment provided, and affected parties would have an opportunity to appeal the final decision.

Comment: It is inappropriate to give high quality status to a wetland thereby precluding impacts just because of the presence of a state listed species which in the case of migratory birds may only use the wetland during a limited time frame. As well, the existing state lists contain records decades old, and it would be a tremendous burden on Indiana business to demonstrate that the state listed species are not present. Tier I and Tier II wetlands should be identified by a peer reviewed scientific process. (JFN, NI, NiS)

Response: IDEM has developed a definition for wetland-dependent species after extensive consultation with USFWS and IDNR. In addition to the definition, the rule includes a list of threatened and endangered species that meets the terms of the definition. This list was provided by the IDNR. Migratory species are not included in this list if the species only utilizes wetlands during migration. If a species were to be officially delisted, the wetland in question would no longer be considered a Tier II wetland as it would not meet the criteria listed in the draft rule. The rule states that if IDNR determines that wetland-dependent species are not present, then the area will be classified as Tier I. The concern that records in the Heritage Database may be dated should be addressed through this mechanism of the draft rules.

Comment: The qualifications according to 327 IAC 2-1.8-4(2)(A) and (B) for classification of a Tier II wetland should at

the very least require the presence of threatened or endangered species to be within the past five (5) or ten (10) years and take in consideration whether the species is passerine, opportunistic, or is truly dependent on that specific wetland habitat. (ES)

Response: IDEM intends to work closely with IDNR to determine if a given area does or can support one (1) of the species listed in this rule. Setting an arbitrary time frame is inappropriate because IDNR may have additional information on the status of the given species, access to recent surveys, and information on the ability of the wetland area to support the species of concern. IDEM has revised the draft rule to only include species that are dependent on wetlands for part or all of their life cycle. The list of wetland-dependent species developed with IDNR and USFWS will be included in the rule.

Comment: Severely degraded examples of rare wetland types and common wetlands that happen to contain a state listed species should not be classified as Tier II wetlands. The ease of classifying a wetland as a Tier II wetland and the difficulty of mitigating a Tier II wetland in effect prohibits any degradation of this type wetland and could lead to overly circuitous routes for pipelines, electric transmission lines, and electric distribution lines which need to traverse the shortest distance possible in order to limit impact to people, consumption of right-of-ways, and costs. (AEP, ES, IEU, JFN, SIGECO)

Response: IDEM disagrees. It would be inappropriate to exclude any of the more rare wetland Tier II types remaining from higher levels of protection even if they are degraded from their natural condition. Given the fact that these wetland types and species are rare, most routes for pipelines, electric transmission lines, and electric distribution lines would not likely encounter these areas. Furthermore, the list of threatened and endangered species has been restricted so that only obligate, wetland-dependent threatened or endangered species need to be considered.

Comment: The term Athreatened@ used in 327 IAC 2-1.8-4(2) needs to be defined so that a field reviewer does not independently decide what is or is not a threatened species. (AECON)

Response: The rule has been modified to include a specific definition of Athreatened@.

Comment: The exceptions listed in 327 IAC 2-1.8-4(2)(B)(i) and (ii) concerning a wetland not having suitable habitat to support a threatened or endangered species and an impact to a wetland not adversely affecting a threatened or endangered species will be difficult to document. It will be an onerous task to predict all repercussions of any wetland destruction particularly to the level of individual species. There would need to be an extensive investigation into the relationship between the impact site and the adjacent area supporting any threatened or endangered species. In addition, there would need to be established data available on the requirements of the species in question, and this type data may not be available for many threatened or endangered species. Who will be responsible for making determinations affecting this rule requirement? Would it be the responsibility of the Aqualified expert@ mentioned in 327 IAC 2-1.8-4(2)(A)? The Aqualified expert@ hired by an applicant may not have the time or motivation to thoroughly investigate a wetland for rare species not readily visible or frequently evident. (DCAS, GIW, HEC, IWL, SCCC, SDCF, VWI)

Response: IDEM has modified the draft rule language to remove the term Aqualified expert.@ The modified draft rule language reads as follows: AIf the Indiana department of natural resources determines that the wetland does not contain suitable habitat to support the threatened or endangered species, then the wetland is not a Tier II wetland. @ IDEM does and will continue to consult directly with the Indiana department of natural resources on these issues because they have statutory responsibility to protect these species and the expertise to decide on the potential effect of projects that may affect wetlands and listed species.

Comment: Development and redevelopment in the City of Gary would be brought to a stop if the Tier II classification of dune and swale according to 327 IAC 2-1.8-4(2)(C)(v) is applied regardless of size or quality to the remnant dune and swale in Gary. These dune and swale remnants are a result of the historic development of Gary; however, these fragments do not represent a functioning or complete dune or swale ecosystem and should not be classified as if they were. Criteria need to be developed for dune and swale to qualify for Tier II inclusion. These criteria should include: (1) a size of five (5) acres or more; (2) a base level of the original diversity and function; and (3) no significant impacts due to hazardous materials at the surface and subsurface. (Gary, NiS)

Response: IDEM disagrees. Dune and swale wetland complexes in northwest Indiana, not just within the city limits of

Gary, are global, rare, and threatened resources. Even remnant dune and swale complexes provide important water quality functions and refuge for rare and endangered organisms. IDEM views all dune and swale complexes as important and, therefore, rejects the argument that exemptions should be made based on size, relative level of degradation, or impacts due to contamination.

Comment: 327 IAC 2-1.8-5(a) states that designated and existing uses for Tier I and Tier II wetlands must be maintained and protected; however, the Clean Water Act requires that designated and existing uses must include not only maintenance and protection but also restoration. (SDC)

Response: IDEM believes the current wording of the antidegradation rule is appropriate. It is true that a goal of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation =s waters. However, the federal antidegradation and water quality standards provisions do not, themselves, require restoration of uses. However, applicants impacting a wetland =s designated and existing uses would have to replace these uses through appropriate compensatory mitigation.

Comment: The draft rule language at 327 IAC 2-1.8-5(b)(1) needs to insert Asignificant@ between Ano@ and Adegradation@ in order to be consistent with the existing federal language and to alleviate some of the manufacturing sector =s concerns. As well, a comma needs to be inserted after Aallowed@ and before Aunless@ to make the meaning clear that designated and existing uses do not need to be maintained and protected if clauses (A) through (D) are fulfilled. (IMA)

Response: As in this draft rule, the existing federal antidegradation rule does not require that degradation be significant before the antidegradation provisions apply. IDEM has inserted a comma before Aunless@.

Comment: IDEM should limit the scope of and clarify the term Adegradation@ to be consistent with the federal rule and not to continue the inconsistent interpretation of the term as has occurred with the surface water quality rules. (IMA, NSWMA)

Response: It is unclear what federal rule is being referenced. IDEM believes the draft rule is consistent with the Clean Water Act and implementing federal regulations.

Comment: If no degradation is to be allowed by IDEM according to 327 IAC 2-1.8-5 because of consideration of wetland designated uses specified in 327 IAC 2-1.8-3, what appeal process is there for an applicant? (IASWCD)

Response: Degradation is not allowed under the rule unless the listed criteria are met. Appeals from final decisions may be taken pursuant to the Administrative Orders and Procedures Act (AOPA) at IC 4-21.5.

Comment: Sedimentation is often sited as a surface water quality impairment. Is it also degradation of a wetland, or is it a natural process? How can a farmer demonstrate no degradation to IDEM when sedimentation is a natural process, and would a farmer be required to provide compensatory mitigation to replace a wetland impacted by sedimentation? (IFB, Wiehr)

Response: Sedimentation can be both a natural process and a source of degradation. If the sedimentation is the result of an anthropogenic process, such as erosion from a construction site or poor farming practices, it is a potential source of degradation and IDEM could take steps under this rule and other existing rules to work with responsible parties to correct the problem. Natural influxes of sediment are typically low and do not cause measurable impacts to water quality in wetlands. Wetlands and other waters of the state are not and should not be considered sediment traps or other best management practices for pollution control.

Comment: Natural sedimentation should not be considered a water quality impairment. How would water quality standards be applied to a wetland that receives natural sedimentation? Functioning wetlands act as natural water filters and will eventually fill with sediment since water seeks its lowest level and carries natural sediment with it. (Nesb, NI)

Response: Natural influxes of sediment are typically low and do not cause measurable impacts to water quality in

wetlands. IDEM does not regulate the natural sedimentation of wetlands. Additionally, wetlands may be much more stable features than once thought. The classical idea of succession developed by Clements in 1916 was the dominant paradigm of succession for the first half of the twentieth century but has been replaced by the continuum model of succession pioneered by Gleason in 1917. Under the classical theory, all systems are moving toward an upland climax. Under the continuum theory, changes occur but not toward any particular climax (Mitsch and Gosslink 1986). Mitsch and Gosslink go further by stating that Athere appear to be few, if any, examples of wetland ecosystems that become terrestrial without a concurrent allogenic, meaning that which is not caused by living things inhabiting the wetland, lowering of the water level. Niering (1987) concurs stating that, Athere is little evidence that wetlands are being replaced by upland forests.@. In other words, the classical idea of succession whereby wetlands by their very nature simply fill in and become dry land is outdated and unsupported. Anthropogenic changes, such as increased erosion, drainage, redirection of water, and nutrient pollution, all cause changes of which some may even result in the transformation of wetlands into uplands, but these cannot be seen as natural changes. Furthermore, the language under 327 IAC 2-1.8-6(b) does not regulate natural changes that occur in wetlands. The filling in of a wetland through natural processes such as organic accumulation would not be restricted by this language.

Comment: According to an EPA 1992 report, nonpoint source pollution is considered to be responsible for between one-third and two-thirds of existing and threatened impairments of the states = waters. Wetlands are combating this problem. Natural wetlands that border cultivated agricultural lands are helping to arrest the movement of nonpoint source pollutants such as sediments, herbicides, insecticides, and fertilizers into the waters of the state and nation. Constructed wetlands adjacent to roadways, parking lots, golf courses, and suburban lawns are performing these same functions with respect to the addition of petroleum products and metals to the nonpoint source pollutant burden. The draft rule should acknowledge and regulate natural and constructed wetlands and their uses as nonsource pollution control mechanisms. (IFW)

Response: Wetlands and other waters of the state are not and should not be considered pollution control structures or other best management practices for pollution control. Influxes of pollutants from the stated sources must be addressed at the source and not by using waters of the state to treat the pollution. Wetlands constructed specifically for the control of pollution, either point or non-point, are not regulated by this draft rule.

Comment: Does IDEM intend to require antidegradation and wetland water quality standards compliance for all the types of wetlands that might meet the IDEM general definition of saturated soils and vegetation, such as: (1) native wetland capable of maintaining the wetland condition naturally; (2) managed wetlands that support wildlife and aquatic species; and (3) wetlands that only exist due to some adjoining land use or development? (IFB)

Response: Each wetland, regardless of its use, how it was created, or its landscape context, is subject to the wetland water quality standards and the antidegradation requirements of this draft rule if it meets the definition contained in the draft rule.

Comment: 327 IAC 2-1.8-5 lacks clear determination of whether a violation will occur based on a single evaluation or if the standard will be measured over a period of time. Without a statement in the rule about the determination of a violation, every wetland in the state could fail to meet the criteria in this section at different points in time. Additional language is needed to define the scope of a violation of the water quality criteria so that unnecessary and unwarranted enforcement or lawsuits can be avoided. (IWC)

Response: 327 IAC 2-1.8-5 sets forth the antidegradation standard and implementation procedures IDEM will use when evaluating an application. Just as there are no specific enforcement procedures set forth in the water quality standards of 327 IAC 2-1 and 327 IAC 2-1.5 for other waters, there are no specific enforcement procedures set forth in the wetland water quality standards. Enforcement will be governed by the same statute, IC 13-30, that governs all of IDEM =s enforcement actions.

Comment: If the term Aexisting uses@ is to be used in 327 IAC 2-1.8-5(b)(1), it should be defined relative to Adesignated uses@. If Aexisting uses@ has the same meaning as Anatural functions @, then the definition should so indicate. (IFW)

Response: The definition of Aexisting uses@ used by IDEM is taken from EPA regulations. Those federal regulations

require states to adopt an antidegradation rule that protects existing uses. The term is a federal definition adopted pursuant to a statute that a federal agency is authorized to interpret, IDEM does not believe it is appropriate to change the definition.

Comment: The broad wording of 327 IAC 2-1.8-5(b)(1) will require additional review of non-wetland related projects that do not currently require a Section 401 water quality certification, and any activity that impacts a wetland even temporarily will be violation of the antidegradation standard and, therefore, will be required to complete compensatory mitigation. This is particularly concerning for activities that are currently permitted and allowed by state law and regulations. 327 IAC 2-1.8-5 should be focused on new activities that are required to have a Section 401 water quality certification and are specifically intended to impose an impact to a wetland. Furthermore, the language of 327 IAC 2-1.8-5(b) should allow for fluctuations imposed by man made activities that are temporary or seasonal. (IWC)

Response: Section 401 of the Clean Water Act only requires IDEM to review and process applications for water quality certifications in cases where an applicant for a federal license or permit wishes to conduct an activity that may result in a discharge into waters of the United States. This is explained in 327 IAC 17-1-2. Section 303 of the Clean Water Act and implementing federal regulations require states to adopt water quality standards that apply to waters of the state. These standards apply to all waters regardless of the type of activity that may be planned. This is similar to the manner that 327 IAC 2 functions for the existing water quality standards. The standards set forth in 327 IAC 2 apply to all waters, but IDEM does not review nonpoint activities that may cause or contribute to violations of the water quality standards.

Comment: Who will determine what are the designated and existing uses of a wetland according to 327 IAC 2-1.8-5(b)(1)? Is the meaning of the draft rule that a completed antidegradation demonstration is not required for an impact to a Tier I wetland but is required for a Tier II wetland impact? (IDOT)

Response: IDEM determines what existing uses may be present in a wetland, and all designated uses are presumed to exist if an area meets the definition of a wetland as described in this draft rule. However, IDEM will review information provided by the applicant in making these determinations. The antidegradation demonstration requirement only applies to Tier II wetlands.

Comment: The antidegradation requirements for a Tier I wetland according to 327 IAC 2-1.8-5(b)(1)(C) call for Aappropriate and practicable steps @ to be taken to minimize impacts, but no description of what is practicable is provided in the rule. (AECON)

Response: IDEM has modified the draft rule language to clarify this section. The modified language reads as follows: APotential adverse impacts to the wetland will be minimized. @

Comment: Tier I wetland antidegradation review requirements at 327 IAC 2-1.8-5(b)(1)(D) that state what compensatory mitigation must replace Aunless it is determined to be unnecessary by the commissioner because no significant impacts to water quality will occur @ sounds like it could become a loophole for the politically connected. On the other hand, having the commissioner require mitigation to be completed before wetland impact may occur is good for on-site mitigation because it will allow wildlife populations to move into the mitigation site before their original habitat is destroyed. (IWL, SCDG, SDCF)

Response: The draft rule contains language to provide the commissioner discretion not to require mitigation in recognition of the fact that certain activities have truly minimal impact on wetlands. This provides some flexibility for the development of general permits but insures, that as a baseline condition, mitigation will be the normal course of action. In no case may the commissioner not require mitigation where more than one-tenth (0.1) acre of wetland will be impacted or a project will have a significant impact on water quality. IDEM agrees that completion of mitigation in advance of impacts will allow wildlife populations to move into the mitigation site before their original habitat is destroyed and intentionally structured the draft rule to provide this protection.

Comment: Under the Freedom of Information Act (FOIA), please provide the basis, including the peer reviewed literature, that was used to establish the rule criteria for determining wetland uses, choosing the one-tenth (0.1) acre size for consideration of being significant, and to allow mitigation of Tier II wetlands with the same uses or higher uses. (Smol)

Response: The Freedom of Information Act (FOIA) is a federal statute that requires federal agencies to provide information under certain circumstances to official requests. The one-tenth (0.1) acre criteria was developed after consultation with the Environmental Protection Agency, the Corps of Engineers, the U.S. Fish and Wildlife Service, and the Indiana department of natural resources to insure consistency among the agencies. This acreage number has been determined by all agencies to truly reflect a minimal impact based on review of the following: (1) previously approved projects; (2) projects that required mitigation; (3) the size and type of wetlands in Indiana; and (4) the potential singular and cumulative effects of impacts to wetlands of this size.

Comment: The one-tenth (0.1) acre limitation according to 327 IAC 2-1.8-5(b)(1)(D) that affects whether impacts to a Tier I wetland are significant is too restrictive and could affect home owners without their knowledge. The requirement should be no more stringent than the Corp of Engineers nationwide permits; requiring mitigation for such small impacts will be unduly expensive and will cause undue delays at IDEM. (AECON, HDI, HFM, IFB, NI, NSWMA, OKD, SIGECO)

Response: The Corps of Engineers has revised its nationwide permits to require mitigation for all impacts to wetlands greater than one-tenth (0.1) acre. This means IDEM =s rules are consistent with federal requirements. The limit is reasonable and allows for minor impacts and flexibility for IDEM to determine what impacts are minimal and reasonable.

Comment: The draft rules will adversely affect home and land owners who rely on the installation of subsurface drainage. In the case of Allen County which was once one hundred percent (100%) wetland, farmers could not afford to farm without drain tiles. (OKD)

Response: IDEM disagrees. The maintenance of drainage tile would probably be exempt under Section 404 of the Clean Water Act; therefore, a Section 401 water quality certification would not be necessary. This draft rule does not change the current regulatory requirements regarding use of field tile.

Comment: The compensatory mitigation requirement of 327 IAC 2-1.8-5(b)(1)(D) for impacts greater than one-tenth (0.1) acre to a Tier I wetland seems arbitrary in light of the classification structure that prioritizes wetlands by significance. How and why was the one-tenth (0.1) acre figure selected? (IASWCD)

Response: The one-tenth (0.1) acre criteria was developed after consultation with the Environmental Protection Agency, the Corps of Engineers, the U.S. Fish and Wildlife Service, and the Indiana department of natural resources to insure consistency among the agencies. This acreage number has been determined by all agencies to truly reflect a minimal impact based on review of the following: (1) previously approved projects; (2) projects that required mitigation; (3) the size and type of wetlands in Indiana; and (4) the potential singular and cumulative effects of impacts to wetlands of this size.

Comment: The determination factor regarding a significant impact to a Tier I wetland according to 327 IAC 2-1.8-5(b)(1)(D) should be at least one-half (0.5) acre or preferably one (1) acre. The one-tenth (0.1) acre limitation contained in the draft rule will impose a hardship on a property owner and result in a significant workload for IDEM with very little gain. (FCS, HendCo, IEU, Nesb)

Response: IDEM disagrees. Currently, all wetland impacts reviewed by IDEM are subject to possible mitigation requirements. This requirement has had no effect on IDEM =s ability to process requests for certifications. Furthermore, recently adopted Corps of Engineers policy regarding wetland impacts states all impacts greater than one-tenth (0.1) acre will require mitigation. This means IDEM is consistent with federal requirements. Increasing the limit to one-half (0.5) acre is unreasonable, will allow significant wetland destruction, will cause adverse impacts to water quality, and is against the public interest. This draft rule does not change IDEM =s current policy on requirements for mitigation; therefore, there is no increase in costs to potential applicants.

Comment: Clarification is needed in 327 2-1.8-5(b)(1)(D) as to whether the significant criterion for wetland impact is tied to greater than one-tenth (0.1) an acre for the property or the size of the wetland. Also, the words Aall@ or Aeach@ should be used in the introduction to 327 2-1.8-5(b)(1)(D)(i) through (vi) to clarify whether all or each of the criteria in subitems (i) through (vi) applies only to impacts to wetlands of less than one-tenth (0.1) acre. (IEI)

Response: The words Aall@ and Aeach@ would make no difference in the meaning of 327 2-1.8-5(b)(1)(D). The criteria listed in the subitems (i) through (vi) follow the introductory language, and as there are no exclusions named, the criteria apply to impacts less than and equal to one-tenth (0.1) acre.

Comment: It is not understandable why compensatory mitigation according to 327 IAC 2-1.8-5(b)(1)(D) must be of the same type as the wetland that is impacted. (IMA)

Response: Compensatory mitigation must replace the designated and existing uses of a given wetland. The uses are completely dependent on the wetland to be impacted and its unique hydrology, soils, plants, and other organisms. Therefore, a compensatory mitigation wetland must be replaced with the same type; a forested wetland must replace a forested wetland, as an example. This concept is currently used in all existing regulatory programs and does not change any present standard.

Comment: Is the commissioner=s consideration of maintenance of existing manmade structures according to 327 IAC 2-1.8-5(b)(1)(D)(i) an opportunity for a higher exemption or a threshold for wetland banking? (IDOT)

Response: This criterion does not, in any way, allow the commissioner to authorize a higher exemption from mitigation. In addition, this criterion does not set any thresholds for the use of a mitigation bank to provide compensatory mitigation.

Comment: Is a field tile an existing manmade structure or a drainage ditch? Is repair of a broken field tile a project requiring IDEM approval? Is a wet spot in a farm field resultant from a broken field tile a wetland? What farming practices when dealing with wet spots one-tenth (0.1) acre or larger in a farm field would require contacting IDEM? (Chas, HDI, IFB, NI, OKD, Wiehr)

Response: Field tiles, as well as drainage ditches that were constructed in an upland area, are considered man-made structures. A wet spot in a farm field resulting from a broken tile is a wetland only if it meets the three (3) parameter test detailed in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual; otherwise, it is just a wet spot. For wetlands that meet the definitions set forth in this draft rule, a farmer would need to contact IDEM if they intend to place fill materials in the wetland, increase or expand tile that runs through the wetland, or use heavy mechanized equipment to clear trees or stumps to bring the area into production.

Comment: 327 IAC 2-1.8-5(b)(1)(D)(ii) needs to include a description of the scientific process that will be used to determine the secondary and cumulative impacts of a project. (SIGECO)

Response: IDEM will evaluate secondary and cumulative impacts based on the specifics of the project, its proximity to other permitted projects, the condition of wetland and water resources in the watershed, and other case-specific factors.

Comment: What authority does IDEM have beyond the impact of a project to judge secondary or cumulative impacts? Will IDEM be allowed to deny a water quality certification because an applicant proposes to clear an upland forest or to develop an upland portion of a property in a way not favored by IDEM? (ES)

Response: IDEM has broad statutory and regulatory authority. For example, IC 13-18-4-4 allows the commissioner to take steps to prevent pollution determined to be unreasonable and against the public interest. Furthermore, IC 13-18-3-11 provides that the water pollution control laws are to be liberally construed. However, secondary or cumulative impacts are to be considered under the rule as one (1)factor in determining whether a project will have a significant impact on water quality. The key is how those impacts will affect water quality and not whether the applicant merely proposes to undertake an activity in an upland area in a way not favored by IDEM.

Comment: In consideration of the significance of Tier I impacts, the commissioner is to consider the duration of the activity associated with the project as required by 327 IAC 2-1.8-5(b)(1)(D)(iv), but the rule does not make clear what connection there is between the duration of the activity and damage to a wetland. In addition, what duration of activity that is considered to be too long or not reasonable should be addressed in the rule. (AECON)

Response: Duration is used in the rule to allow for activities that may temporarily impact a wetland. For example, a temporary activity may be the construction of a work causeway to allow access to an area until a permanent structure can be built. Activities with this type of duration, where the impact is not permanent, would have a lesser impact on wetlands and may not require compensatory mitigation provided the area is restored to pre-construction conditions.

Comment: Is it a requirement of the commissioner, the applicant, or some other person to provide the information required by 327 IAC 2-1.8-5(b)(1)(D)(v)? (IDOT)

Response: This information will be gathered and assessed by IDEM. However, applicants may also provide that information to IDEM and IDEM will then independently evaluate it.

Comment: According to 327 IAC 2-1.8-5(b)(1)(D)(vi)(FF), the commissioner is to consider whether a project less than one-tenth (0.1) acre in size is being undertaken to control, abate, or correct any polluted condition under IC 13-18-7. This language is extremely broad and could lead to abuses. (SDC)

Response: IDEM does not believe this language will lead to abuses. The abatement or correction would only apply if less than one-tenth (0.1) acre of wetland is to be impacted. Additionally, this is just one (1) factor for IDEM to consider and is not determinative.

Comment: The final statement in 327 2-1.8-5(b)(1) that the commissioner may require compensatory mitigation of a Tier I wetland to be completed and approved prior to any impact to the wetland needs to be clarified as to whether the actual mitigation, for example, the actual wetland replacement with documentation of survivability, must be completed prior to any impact. If this is the intent of the rule, it will be difficult to achieve compliance as the time involved is too long. The installation of a natural gas pipeline even when planned well in advance does not have that type of lead time. As well, this requirement would turn away developers who could not wait two (2) to five (5) years to see if the mitigation were successful. In the case of highway projects, delays of this magnitude would ultimately cost citizens in terms of money and safety as highway projects are scheduled based on the life of the structure in question. It is suggested that an emergency criteria or petition for relief be considered for such circumstances. (ES, Gary, IDOT, IEI, JFN, NiS)

Response: This provision is not mandatory. IDEM would generally only require that the compensatory mitigation be completed and approved prior to any impact occurring to a Tier I wetland if IDEM considered the risk of mitigation failure to be high or if IDEM determined that there would be an adverse impact to water quality if mitigation was not performed prior to the loss of uses. This provision and the requirement for up-front mitigation for Tier II wetlands actually provide flexibility by allowing applicants to attempt to mitigate for projects that IDEM otherwise might deny based on past history or predicted likelihood of success for the particular wetland type. The exact requirements for the mitigation would be set forth in the water quality certification.

Comment: The requirements under consideration at 327 IAC 2-1.8-5(b)(2)(A) should be in regard to both existing and designated uses not simply designated uses. (SDC)

Response: IDEM agrees and has made modifications to the draft rule as suggested.

Comment: The statement of 327 IAC 2-1.8-5(b)(2)(A)(i) that practicable alternatives are presumed to be available for a Tier II wetland unless it is clearly demonstrated otherwise does little more than emphasize proper implementation of avoidance and minimization measures as they apply to all wetlands in the state. Please include the statement in the section describing the Tier I antidegradation implementation standard and procedures. (IWL, SDCF)

Response: IDEM disagrees. The intent of this language is to clearly indicate to the regulated community that Tier II wetlands carry a higher degree of protection. For this reason, the burden for demonstrating that an impact is necessary or in compliance with water quality standards is significantly higher. Practicable alternatives are also presumed to exist for non-wetland dependent activities occurring in Tier I wetlands under Article 17.

Comment: The language of 327 IAC 2-1.8-5(b)(2)(A)(iv)(BB) that requires compensatory mitigation of a Tier II wetland to be completed and proven successful as approved by the commissioner prior to any impact occurring to the Tier II wetland is illogical and not a reasonable request. It would be considerably more efficient and beneficial to the cost of a project to do the wetland mitigation while proceeding with the wetland impact. Requiring an applicant to wait on the completion of a mitigation site before starting an impact to a wetland will add unnecessary costs to housing development. This requirement should be optional for both Tier I and Tier II wetlands. A performance bond in concert with a higher mitigation ratio, combined with IDEM =s and the Corps of Engineers = authority, is sufficient to insure that concurrently constructed mitigation is completed. (IBA, IDOT, IEI, IMA, NSWMA, SIGECO, WM)

Response: Tier II wetlands are those wetlands that are rare and valuable and immensely difficult, if not impossible, to recreate through mitigation. While IDEM understands that the housing development community is concerned about costs , the goal of these draft rules and the Clean Water Act is to incur no reduction in the extent of wetlands that exist in the state. In recognition of the fact that few wetlands remain in Indiana and that those qualifying as Tier II wetlands are a mere fraction of those remaining wetlands, this rule imposes more stringent requirements before impacts to Tier II wetlands may be authorized. Studies of the success of replacing even Tier I wetlands have indicated that many sites have not successfully replaced the uses present in the impacted wetland. Advance completion of mitigation is not mandatory for impacts to a Tier I wetland and will not be required as a matter of course.

Comment: The requirement to complete compensatory mitigation prior to impacting a Tier II wetland should be eliminated in favor of the use of incentives such as lowering the mitigation ratio for an applicant who uses a wetland bank or does complete the mitigation prior to initiating the impact. The use of a wetland bank or providing a performance bond should be sufficient to insure the completion of a mitigation site. (JFN, NiS)

Response: IDEM disagrees. Little evidence currently exists to show that many of the Tier II wetland types are mitigatable. It is reasonable to allow for advancements in the field of wetland mitigation; therefore, IDEM has allowed persons the opportunity to attempt to recreate these wetland types. Given the current level of uncertainty, it is necessary to require a demonstration of success prior to allowing impacts. Incentives, such as performance bonding, do not eliminate the uncertainty of recreating these wetland types. If a mitigation bank successfully restores an acid bog, then applicants could use this bank as up-front mitigation.

Comment: It is recommended that IDEM issue a provisional water quality certification to an applicant to justify the cost of complying with 327 IAC 2-1.8-5(b)(2)(A)(iv)(BB) by providing compensatory mitigation in advance of impacting a Tier II wetland. IDEM should not adhere to absolutes in regulations that may prevent considering options that would account for advances in the science or past history of mitigation. As an example, it was considered prior to 1993 not to be possible to mitigate a dune/swale wetland, but since that time, successful completion of dune/swale mitigation has been accomplished. (ES)

Response: IDEM has limited the types of wetlands necessitating up-front mitigation to those wetlands that have historically been difficult, if not impossible, to replicate. IDEM still believes most efforts to recreate these wetland types will fail and sees no reason to provide what would essentially be up-front authorization for wetland impacts. A different understanding of what a provisional water quality certification would provide is possible, but IDEM does not believe it would differ essentially from a standard certification that is subject to enforcement action if the applicant fails to comply with the conditions set forth in it.

Comment: Who does the allowing referred to by the wording Aif allowed@ and what is the meaning of Acompleted@ and Aapproved@ in 327 IAC 2-1.8-5(b)(2)(A)(iv)(BB)? (IDOT)

Response: IDEM will decide if compensatory mitigation will be allowed for a given project as described in 327 IAC 2-1.8-5(b)(2)(A)(iv). ACompleted@ means that all activities required to construct the compensatory mitigation site are accomplished, and all designated and existing uses of the original wetland have been successfully recreated. AApproved@ means IDEM has evaluated the compensatory mitigation site and determined the site to be

completed and has issued a written document stating that the compensatory mitigation site is completed.

Comment: It is impractical to completely disallow impacts to Tier II wetlands if compensatory mitigation is not possible. There may be projects where the socioeconomic advantage to the community overrides the presence of the wetland. This should be a local decision since it is tied to land use. It is suggested that a petition for exclusion be considered to allow impacts to a Tier II wetland. (IEI)

Response: IDEM disagrees. If mitigation alternatives are not available and adverse impacts to a wetland would occur as a result of the project, IDEM would be in violation of its own rules if it allowed the impact to proceed. Mitigation offsets potential adverse impacts to water quality and insures compliance with both federal and state requirements. Socio-economic need, in and of itself, cannot be used as a criteria that overrides the need for mitigation.

Comment: The requirements of 327 IAC 2-1.8-5(b)(2)(B) and (C) calling for an antidegradation demonstration appear to be unnecessary and should be waived if an applicant has replaced the Tier II wetland to be impacted with a successfully completed and approved compensatory mitigation site that supports uses equal to or higher than existing uses of the impacted wetland. Having successfully mitigated the impacted wetland should mean that no degradation has occurred. (IEU, SIGECO)

Response: The requirements of 327 IAC 2-1.8-5(b)(2)(B) and (C) calling for an antidegradation demonstration is needed even in the case where an applicant has replaced the Tier II wetland to be impacted with a successfully completed and approved compensatory mitigation site that supports uses equal to or higher than existing uses of the impacted wetland. Even if it is possible to replace the wetland as per the requirements of the rule, there may be no basis for impacting the wetland according to the antidegradation criteria. Development must, based on the criteria, have an important socio-economic justification in order to impact a Tier II wetland. Additionally, IDEM must consider all potential impacts to water quality as a part of the antidegradation review. In some cases, this may mean mitigation may be feasible, but the project impacts would have an adverse impact to water quality and could not be adequately mitigated. The circumvention of federal antidegradation requirements applicable to high quality waters, such as Tier II wetlands, by not completing an antidegradation demonstration can not be allowed.

Comment: 327 IAC 2-1.8-5(c) contains provisions the commissioner shall consider in determining whether to allow an impact to a wetland and needs to include, under subdivision (2), a requirement for consultation with IDNR regarding anticipated impacts to wetlands containing threatened or endangered species or their habitat. (IDNR)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: IDEM should rethink and clarify the antidegradation provision of the draft rule because, as written, a construction project is less likely to trigger an antidegradation violation than other common situations, such as land use changes, drainage changes, pond shore weed clearing, or natural evolution of a wetland. (IMA)

Response: IDEM is unclear as to the meaning of this comment.

Comment: The draft rule needs to address the method to implement antidegradation for surface water and ground water upstream of a wetland designated as an Outstanding State Resource Water (OSRW) or an Outstanding National Resource Water(ONRW). (IEU, IMA, SIGECO)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431. Antidegradation procedures for ONRWs will remain in the rule but will reflect the federal requirements.

Comment: In 327 IAC 2-1.8-5(d), the wording should be modified so the commissioner ensures that no significant degradation occurs to an OSRW or ONRW. The term Adegradation@ needs definition. (IEU, SIGECO)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431. Antidegradation procedures for ONRWs will remain in the rule but will reflect the federal requirements. At this point, IDEM believes it is appropriate to apply the definition of Adegradation@ set forth in

Random House Webster=s College Dictionary, that defines Adegradation@ as the act of degrading. To Adegrade@, according to the same source, means to lower in quality.

Comment: The rule at 327 IAC 2-1.8-5(d) needs to state that if short term degradation to an OSRW or an ONRW is allowed to occur, then the wetland must be restored to its predegraded condition. (SDC)

Response: IDEM agrees and has modified the draft rule to reflect this change. *Comment:* The construction of a bridge takes longer than a year. Virtually every water quality certification issued by IDEM will go beyond the condition stated in 327 IAC 2-1.8-5(d)(1) and will require an extension, thus, increasing the work load of IDEM. (IDOT)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431. If the impact of the bridge construction in an ONRW would last for longer than one (1) year, then the applicant would be prohibited from utilizing the exception. Extensions of the exception cannot be granted.

Comment: The requirement of 327 IAC 2-1.8-5(d)(1) concerning the prohibition on an impact to an OSRW or an ONRW not lasting more than a year should specify that impact means both the direct disturbance to a wetland and any subsequent effects of that disturbance. The rule needs to clarify the extent of any impact that must be confined within a year and who is responsible for making the determination about the extent and duration of an impact. (DCAS, HEC, IWL, SCCC, SDCF, VWI)

Response: IDEM has modified the rule to clarify that it will also consider secondary impacts of proposed projects in ONRWs. IDEM is responsible for making all determinations about potential impacts associated with a proposed project.

Comment: Even the short term impacts of less than twelve (12) months that will be allowed to occur to an OSRW and ONRW according to 327 IAC 2-1.8-5(d)(1) will cause damage that needs to be restored or mitigated or, best of all, avoided. (IWL, SCDG, SDCF)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431. Since even short term impacts to an ONRW would require a water quality certification, appropriate mitigation may be required as a condition of certification depending on the impact that may occur.

Comment: 327 IAC 2-1.8-6(a) applies minimum water quality standards to wetlands, and, as written, are of concern because surface water quality standards should not be applied to the ground water and soil within wetlands but rather only to the area above saturated soil. (AEP, ICC, IEU, IMA, NSWMA, SIGECO)

Response: The criteria listed in 327 IAC 2-1.8-6 would only be applicable to the surface water within the wetland.

Comment: Are all the citations listed in 327 IAC 2-1.8-6(a) appropriate for wetlands? (SDC)

Response: IDEM has modified the rule to clarify that the temperature criteria set forth in 327 IAC 2-1-6(b)(4) and 327 IAC 2-1.5-8(c)(4) are not applicable to wetlands. All other citations are appropriate and correct for wetlands.

Comment: It is inappropriate to apply both 327 IAC 2-1-6(a) and 327 IAC 2-1.5-8(b) as minimum water quality criteria to all wetlands; to do so will require wetlands throughout the state to comply with both water quality standards for surface waters inside and outside the Great Lakes Basin. (ICC, IMA, NSWMA)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: It is inappropriate to apply the E. coli recreational water quality standard of 327 IAC 2-1-6(d) to all wetlands. This standard was established for bathing beaches. Additionally, many wetlands are habitat for waterfowl whose presence

will make this standard unachievable. (AEP, ICC, IEU, IMA)

Response: Under the current water quality standards, all waters are currently designated for full-body contact which means that the E.coli criteria set forth in 327 IAC 2-1-6(d) apply. The draft rule has continued this designated use for wetlands in recognition of the goals of the Clean Water Act and the fact that many people do frequent wetlands. Furthermore, EPA does not currently have separate E.coli criteria that apply depending on whether the source of the E.coli is from humans or from animals.

Comment: The water quality standards required by 327 IAC 2-1.8-6(a) need to be reconsidered in recognition of the following examples: (1) the very slow flow rates of most wetlands create a variety of physical and chemical conditions that are stressful to many fish, such as occurs during certain seasons when dissolved oxygen becomes so low as to exclude many fish species; (2) wetland water temperature is often high enough to exclude many fish species and prevent the wetland from meeting the temperature standard in 327 IAC 2-1-6(b)(4); (3) the slight turbidity of the bottoms of some wetlands will eliminate the fish species that prefer rocky substrates, particularly during the spawning season; (4) naturally occurring conditions in wetlands are likely to prevent organisms such as salmonids from thriving in wetlands; (5) the acidic water of bogs and the alkaline water of fens are out of the required pH of six (6) to nine (9); and (6) the common occurrence of swamp gas production from bacterial oxidation and reduction is likely to cause wetlands to be unable to comply with the narrative standards in

327 IAC 2-1-6(a)(1)(C) that specifies odors from a wetland be below levels that cause a nuisance. (AEP, ICC, IEU, IMA)

Response: IDEM intended to reference only those parts of the current water quality standards that are applicable to wetlands. IDEM has modified the proposed rule to clarify that the temperature criteria set forth in 327 IAC 2-1-6(b)(4) and 327 IAC 2-1.5-8(c)(4) do not apply to wetlands. The dissolved oxygen and pH criteria in 327 IAC 2-1-6(b)(2) and (3) and 327 IAC 2-1.5-8 (c)(2) and (3) are not included in 327 IAC 2-1.8-6. The other referenced criteria and wetland-specific criteria found at 327 IAC 2-1.8-6 are appropriate. IDEM has made other changes in 327 IAC 2-1.8-6 to address the noted concerns.

Comment: IDEM should reconsider the minimum water quality criteria for wetlands required by 327 IAC 2-1.8-6(a) because these standards will cause IDEM to unnecessarily waste resources on 303(d) listings and total maximum daily loadings (TMDL). (AEP, IEU, IMA)

Response: Indiana is required to have water quality criteria for all waters of the state, including wetlands. The referenced criteria already apply to wetlands under the existing water quality standards rules because they already apply to all waters of the state. States have been required to evaluate wetlands for TMDL listing purposes in several states where litigation has been pursued.

Comment: In the hope IDEM will consider including off-stream wetlands as a specific classification, then the section title of 327 IAC 2-1.8-6 should be AMinimum water quality criteria for wetlands having waters continuous with the waters of the state.@ (IFW)

Response: IDEM does believe that off-stream wetlands should be treated differently than waters that are adjacent to streams.

Comment: If a particular wetland fails to meet the wetland water quality standards, is it determined to be an impaired wetland needing to be listed on the 303(d) and 305(b) reports with the development of TMDL? Does IDEM have the legal authority to control land use related to water quality issues or to address nonpoint source contributions to wetlands. (IFB)

Response: Wetlands are waters of the state and, therefore, are legally required to be treated the same way as other waters for purposes of Section 303(d) listing and CWA Section 305(b) reports. If impaired, IDEM would need to consider numerous factors before it determined whether a TMDL would be required and what priority to accord to it. Other than its authority pursuant to Section 401 of the CWA, IDEM has the same authority to address water quality impacts and nonpoint source contributions to wetlands as it does to other waters.

Comment: The wording Amust be maintained @ used in 327 IAC 2-1.8-6(b) is vague and should be reworded to provide clarification. (SIGECO)

Response: AMaintained @ is a word that comes directly from federal regulations. The dictionary definition of Amaintain@ means to keep in existence or preserve. IDEM believes this is clear.

Comment: The minimum water quality criteria of 327 IAC 2-1.8-6(b) are too subjective and do not consider natural fluctuations or changes in the hydrologic regime. The reference to Anormal@ is not defined. The criteria need to reflect changes in natural environment, particularly temporal fluctuations due to seasonal changes, droughts, and low flow conditions. (IWC)

Response: IDEM has modified the draft rule to address the noted concerns.

Comment: To maintain the wetland characteristics required by 327 IAC 2-1.8-6(b)(5) of normal water flows, levels, or elevations could be very difficult to quantify and may result in further impact to rather than protection of a wetland if remediation is required. (IDOT)

Response: The meaning of this comment is unclear, and IDEM is unable to answer.

Comment: 327 IAC 2-1.8-6(b)(5) and (6) require absolute adherence to water levels and may preclude significant improvement possible to a wetland where normal water elevation is below that historically observed in a particular wetland. Many of the forested wetlands today were emergent wetlands as recently as thirty (30) years ago. The shift in plant community and water regime is the result of human disturbance. It is a fallacy to assume that a modification to water level is always a negative impact. (ES)

Response: 327 IAC 2-1.8-6 has been modified to clarify that changes in water levels will not be prohibited unless they cause a significant adverse impact on wetland characteristics. The draft rule will not preclude the natural succession of one (1) wetland type to another.

Comment: The terms Anatural@ and Anormal@ are used alternately in 327 IAC 2-1.8-6(b)(1)through (6). It is requested that all reference to Anatural@ be eliminated and substituted with Anormal@ because it is believed that this wording change will accomplish the goal of maintaining existing uses without creating misunderstandings and inconsistent interpretation that could occur if Anatural@ conditions were the requirement, such as in the example of an expanded wetland where mitigation increases the wetland size and, therefore, changes the seasonal temperature variation; yet, even if the water height were to be maintained it could be considered a violation of the Anatural@ condition. (IMA, SIGECO)

Response: These terms have been eliminated from this section of the rule.

Comment: The term Aphysiological@ is used in 327 2-1.8-6(b)(7) to describe a type characteristic to be supported by hydrological conditions, but it is unclear what is meant by the term. Is it the same as physical characteristics? If not please clarify. (IWL, SDC, SDCF)

Response: IDEM has modified the draft rule language at 327 2-1.8-6(b)(7) by replacing the term Aphysiological@ with the term Aphysical,@ to reflect the original intent of the language.

Comment: Does compliance with the minimum water quality criteria and characteristics listed in 327 IAC 2-1.8-6(b)(1) through (7) affect the ability to construct a lake or reservoir in a stream or ditch where the water levels will be raised? Are the characteristics of subdivisions (1) through (7) absolute prohibitions or is it possible to permit certain activities though with greater scrutiny and potentially greater mitigation requirements? (JFN)

Response: Alterations of streams and ditches are not addressed by the draft wetland water quality standards because these standards are specific to wetlands only.

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The rule at 327 IAC 2-1.8-2, having excluded faunal criteria in the wetland definitions, is responsible for limiting the number and types of OSRW wetland types possible under 327 IAC 2-1.8-7(a)(1). (Smol)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: High quality, ground water fed, wet prairies should be included among the wetland types listed in 327 IAC 2-1.8-7(a)(1) as eligible for designation as an OSRW. (IWL, SCDG, SDCF)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: 327 IAC 2-1.8-7(a)(1)(F) uses the term Adune swale@ as one (1) type wetland that may be recommended for designation as an OSRW. Is this term different than Adune and swale@ that is used elsewhere in the rule? (Gary)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: Documentation and confirmation of the presence of threatened or endangered species on a wetland being considered as an OSRW will be critical. Will IDEM accept the word of just anyone such as a trespasser claiming to have seen a threatened or endangered species? (ES)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: Again, as with the wetland classification criteria in 327 IAC 2-1.8-4, the criteria required by 327 IAC 2-1.8-7 to designate a wetland as an OSRW needs to consider more in addition to habitat elements. There may be wetlands that provide critical functions to an area, and those wetlands warrant status superior to Tier I. (DCAS, HEC, IWL, SCCC, SDCF, VWI)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: Wetland functions such as aquifer recharge, unit of sole source aquifer, unit of wellhead protection zone, flood detention, and protection of OSRW, ONRW, and river basins should also be addressed in 327 IAC 2-1.8-4 and 327 IAC 2-1.8-7. (IWL)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: Can a river be designated as an OSRW? Is there a mechanism to remove an OSRW or ONRW designation from a water should someone petition to do so? Does seasonal mean every year for a full season? Is a farmed wetland which is only graced by sandhill cranes every few years and only for a few days eligible for OSRW designation? It is unreasonable that according to this draft rule, a contaminated, degraded dune and swale with no native vegetation or animals is eligible for OSRW status. (JFN, NiS)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The designation of a water as an OSRW should not prevent riparian restoration or bank stabilization projects. (JFN)

Response: The designation of waterbodies as an Outstanding State Resource Water does not prevent riparian restoration or bank stabilization in cases where these projects would improve water quality or the riparian corridor of a designated waterbody. The designation is intended to insure that high water quality in the designated waterbody will be protected from adverse impacts, but it does not preclude efforts to improve water quality.

Comment: Meeting four (4) of the six (6) criteria in 327 IAC 2-1.8-7(a)(3) is too low a standard for an OSRW. The criteria of clauses (C) and (D) should be required for every OSRW. (ES, JFN, NiS)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The four (4) out of six (6) requirements of 327 IAC 2-1.8-7(a)(3) should be reduced to three (3) out of four (4) by eliminating clauses (C) and (E). Otherwise, the section title should be expanded to ACriteria to classify a wetland that has waters continuous with the waters of the state as an outstanding state resource water or an outstanding national resource water@. (IFW)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: Are the characteristic species mentioned in 327 IAC 2-1.8-7(a)(3)(A) the same as those previously identified as indicator species or does this term encompass a larger group of species? (DCAS, IWL, SCCC, SCDG, SDCF, VWI)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The requirement at 327 IAC 2-1.8-7(a)(3)(A) for the presence of eighty percent (80%) of the characteristic wetland species is much too exacting because every natural area is unique and may not fit the classic mold yet still be a very high quality and diverse wetland. Furthermore, if what is meant by characteristic species is the indicator species listed in 327 IAC 2-1.8-2 associated with the defined wetland types, then, again, it is too extreme a standard because many of these species are listed as rare to endangered in Indiana which means they are found only in a very few sites. It is recommended that level of species presence be set at fifty percent (50%). It is heartening to read that the rule includes protection under 327 IAC 2-1.8-7(a)(3)(F) for wetlands in various protected areas such as state nature preserves. (IWL, SCDG, SDCF)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The information about zoological, planktonic, and microorganismic components in most wetlands is so limited as to be unfairly overlooked in making assessments under 327 IAC 2-1.8-7(a)(3)(A) that would show an eighty percent (80%) presence of characteristic species. (Smol)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The term Aincorporated land trust @ used in 327 IAC 2-1.8-7(a)(3)(F)(i) is too restrictive. The Save the Dunes Conservation Fund (SDCF) is a companion organization to the Save the Dunes Council and is a recognized 501(C)(3) organization under the Internal Revenue Code. The SDCF has land acquisition as one (1) of its identified purposes, but it is not incorporated as a land trust. At least one (1) land trust in Indiana was organized as a charitable trust under the Internal Revenue Code but is not incorporated. It would seem the intent of the rule would be to utilize the work of these

organizations but is worded in this subitem (i) to exclude them. (SDC)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: All wetlands receive protection through the Clean Water Act and the EPA implementing rules; therefore, it is unnecessary to include the language of 327 IAC 2-1.8-7(b)(1) concerning Anational significance @ in the rule. (ICC, IMA)

Response: IDEM has revised the rule to be comparable with the definition set forth at 327 IAC 2-1.5-2(63). The term Anational significance @ is no longer used.

Comment: The term AONRW@ is widely and clearly understood so it =s use is acceptable unless the rule were to change AOSRW@ to Tier III in which case it would be fitting to use ATier III F@ to indicate the federal level of ONRW. It is recommended that another subdivision in subsection (b) be included for Registered National Natural Landmarks. (SDC)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: Other rulemaking bodies such as the Water Quality Advisory Group and the state legislature are reviewing outstanding state resource waters; therefore, this draft rule should not address this topic until sufficient direction is provided by the other rulemaking bodies. (IMA)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The rule should include at 327 IAC 2-1.8-8(a) an additional method for designating a wetland for exceptional use, the equivalent of OSRW or ONRW for waters outside the Great Lakes Basin, by utilizing a direct petition to the commissioner as provided by 327 IAC 2-1-10. (SDC)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The requirement of 327 IAC 2-1.8-8(c)(1) that the commissioner prepare a detailed analysis should have already been provided according to subsection (b)(1) through (3) by the person requesting the designation. The commissioner would then determine if the submitted nomination has met the requirements of subsection (b). If the request for nomination is done according to subsection (a)(1), then the water pollution control board shall give notice and hold a hearing as required by IC 13-14-8-5. (SDC)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The procedures to list a wetland as an OSRW or ONRW specified in 327 IAC 2-1.8-8 may result in unnecessary administrative burden for IDEM because there is no mechanism or criteria for IDEM to reject a nomination and no time limit for IDEM to provide detailed analyses and summary documents. The process for nominating a wetland should require additional factors beyond those listed in the draft rule. Without some procedural limitations, the nomination process could be used to stop time sensitive development projects. Flooding IDEM with nominations would be an obvious and effective means of slowing or stopping Section 401 applications and tying up IDEM =s resources. (Gary, IMA)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: It is bad public policy to allow recommendation for an outstanding state or national resource water to be made

by other than the wetland owner without the wetland owner ▫s consent. (HDI, HFM, IASWCD, IFB, JFN, Nesb, NI, Wiehr)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: It is very good that the rule at 327 IAC 2-1.8-8 has recognized the appropriateness of public involvement in all areas of public policy and has provided that interested parties can submit nominations for an OSRW and ONRW. (IWL, SCDG, SDCF)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: 327 IAC 2-1.8-8(b) needs to include a requirement that a person nominating a wetland as an OSRW or ONRW must notify the parties identified in subsection (c)(2)(A) through (F) before the nomination is submitted to IDEM for review. (IWC)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The analyses and summary documents required to be prepared by IDEM according to 327 IAC 2-1.8-8(c)(2) needs to have a time limit by when IDEM shall prepare the documents. (IMA)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: Additional affected parties need to be notified under 327 IAC 2-1.8-8(c)(2) of the consideration of designation of OSRW or ONRW. It is recommended that 327 IAC 2-1.8-8(c)(2)(D) be expanded to include all property owners within one (1) or two (2) miles or within the drainage area served by the wetland. (IMA)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The requirements of 327 IAC 2-1.8-8(c)(2) should be satisfied primarily by fulfilling the requirements of IC 13-14-8-5. The notices to be made by the commissioner according to clauses (A) through (C) are far more extensive than required for other IDEM actions. (SDC)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: 327 IAC 2-1.8-8(c)(3) and (4) need to be made compatible with IC 13-14-8-5 and 327 IAC 2-1-10. (SDC)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: Thank you for definitively stating in 327 IAC 17-1-1 that no net loss of wetlands acreage and existing and designated uses in the state is the purpose of this article. The implementation of these rules needs to assure that this purpose is fulfilled. (IWL, SCDG, SDCF)

Response: IDEM is committed to meeting the purpose of this article. IDEM resources, rule language, partnerships with federal and state agencies, and increased awareness of the importance of wetlands will assure this purpose is met in the implementation of these rules.

Comment: It should be specified in 327 IAC 17-1-1 that the purpose of the rule also includes maintaining and protecting the functions of wetlands. (SDC)

Response: IDEM does not define Awetland functions@ or use that term in the draft rules but instead uses the term Awetland uses@ and requires that they be protected and maintained.

Comment: A Section 401 water quality certification should only be approved for water dependent projects, and any mitigation that is approved should only apply to restoring historic wetlands. (GIW)

Response: IDEM disagrees. The review procedures and standards set forth by this rule provide a framework for reviewing all projects in a fair and reasonable manner which is consistent with IDEM =s current regulatory program. It is unreasonable and unnecessary to restrict options for compensatory mitigation since successful mitigations have been performed in areas where wetlands may not have historically existed. IDEM does support and emphasizes that compensatory wetland mitigation should first take place in areas that previously contained wetlands.

Comment: The use of the term Aperson@ in 327 IAC 17-1-3 seems unduly restrictive and confusing. An outside contractor hired by a land owner to perform a fill project for which the land owner received a water quality certification could be in violation of this section as it is written. A suggested clarification of this section would read as follows: AAn activity resulting in a discharge into waters of the state that requires a federal permit or license may only proceed after the issuance of a water quality certification or waiver thereof from the department of environmental management under this article. @. (SIGECO)

Response: This was not the intent, and IDEM has clarified the provision. The term Aperson@ is defined at IC 13-11-2-158 and applies to water pollution control laws and will include this regulation when final.

Comment: Among definitions in 327 IAC 17-1-4, terms should be defined for wetland creation and wetland restoration with distinction made between the two (2) terms indicating that restoration is the preferred method of compensatory mitigation. (HEC)

Response: IDEM agrees and has modified the draft rule language accordingly. IDEM does not believe that it is appropriate to state a preference for mitigation methodology in the definition.

Comment: The words Aauthorized agent@ need to be added to the definition of Aapplicant@ at 327 IAC 17-1-4(3). (SIGECO)

Response: IDEM purposefully left authorized agent out of the definition because the agent should not be the applicant. The applicant is the entity on whose behalf the project is being conducted.

Comment: In the definition of ACorps general permit@ at 327 IAC 17-1-4(7), is IDEM interpreting a general permit to be a nationwide permit? Each is a specific item different from the other. IDEM has not included discussion about nationwide permits anywhere in the draft rules. (IDOT)

Response: A general permit includes both nationwide and regional permits. The federal references for these permits are found at 33 U.S.C. 323.3(h) and 33 U.S.C. 330.2(b). IDEM did not feel it was necessary to specifically refer to both nationwide and regional permits.

Comment: What peer reviewed literature is there to support the use of wetland enhancement as defined at 327 IAC 17-1-4(12)? The term is seductively simple sounding because of the poor state of understanding of wetland dynamics. (Smol)

Response: 327 IAC-17-1-4(12) states that: AAEnhancement@ means the conversion of one wetland type to another with a higher perceived value; it is considered to be an impact to a wetland =s existing and designated uses.@ This language clearly states that enhancement will not be considered as mitigation but rather as an impact. IDEM has separated what is

commonly called Aenhancement@ (Lewis 1989) into two terms, Aenhancement@ and Arehabilitation.@ Rehabilitation is encouraged by the draft rules while enhancement is regulated as an impact.

Comment: The definition of Afarmed wetland@ at 327 IAC 17-1-4(13) is different than the Corps of Engineers or the NRCS definitions. (IDOT)

Response: IDEM has included the correct definition in the draft rule for preliminary adoption.

Comment: A Afinal decision@ defined at 327 IAC 17-1-4(14) should be a decision by the commissioner rather than the department. (SDC)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: In the event that a forested wetland is impacted and requires mitigation after mature trees have been harvested and sold from the site, it should still be required to be mitigated as a forested wetland. Therefore, it is recommended that the definition of Aforested wetland@ at 327 IAC 17-1-4(15) should be expanded with the following language: Aand a density that would form a full canopy or that contains stumps representative of trees of the same size and density. @. (IFW)

Response: IDEM has modified the definition of forested wetland to read as follows: AAForested wetland@ means a wetland dominated by woody vegetation that has a diameter, at breast height, greater than three (3) inches, regardless of total height. Wetlands which have been cleared of woody vegetation within five (5) years previous to the project will be considered forested wetlands by the department.

Comment: The definition of Aopen water@ at 327 IAC 17-1-4(17) needs clarification as to whether this is the wetland definition of open water or the Corps of Engineers definition of open water in relationship to Awaters of the United States@. (IDOT)

Response: IDEM has modified the following definitions to read as follows: AAOpen water@ means areas of a wetland that are permanently inundated at mean annual water depths less than or equal to six and six-tenths (6.6) feet. These areas may contain little or no vegetation. @ and AADeep water@ means areas that are permanently inundated at mean annual water depths greater than six and six-tenths (6.6) feet. These are areas that are not wetlands and may include lakes, rivers, ponds, and borrow pits.@

Comment: The definition of Awater dependent@ at 327 IAC 17-1-4(25) is very unclear. (IDOT)

Response: IDEM has modified the definition in the draft rule.

Comment: The correct citation in 327 IAC 17-1-4(27) concerning Awaters of the United States@ should be 33 CFR rather than the 40 CFR that is in the draft rule. (SIGECO)

Response: IDEM has corrected the citation.

Comment: Will the application form referenced in 327 IAC 17-2-1(a)(1) be in accordance with the Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1? A roadway project may have several wetland impacts and several stream channel modifications, are each to be submitted separately or as one (1) certification application? (IDOT)

Response: Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 provides examples of wetland delineation forms but not application forms as specified in this section. Roadway projects that impact multiple water bodies may be submitted as one (1) application that clearly lists proposed impacts and project description.

Comment: A more generalized requirement to follow whatever is the currently established Corps of Engineers procedures needs to be included in 327 IAC 17-2-1(a)(6) rather than mandating that the 1987 delineation manual be used. (NSWMA,

WM)

Response: It would be IDEM=s preference to do so, but state rules are required by the Attorney General =s Office to specify the date of the delineation manual.

Comment: None of the definitions of wetland in these draft rules conforms to the Corps of Engineers definition; yet, 327 IAC 17-2-1(a)(6) requires the submission of a wetland delineation in accordance to the Corps of Engineers Wetlands Delineation Manual. Flood plains, farm ponds, borrow pits, and active gravel pits are included in the IDEM wetland definition but not in the Corp of Engineer =s definition. How are these systems to be delineated? (IDOT)

Response: All of the definitions of wetlands and wetland types conform to definitions established by the Corps of Engineers in regulation and in the Corps of Engineers 1987 Wetland Delineation Manual. Flood plains are not included in any definition in this rule; this term is defined by statute administered by IDNR. Farm ponds, borrow pits, and gravel pits are waters of the state as defined in statute. These systems are self-apparent and require no separate Adelineation procedure@.

Comment: 327 IAC 17-2-1(a)(8) should be modified to reflect a three (3) acre exemption for an alternatives analysis. The draft rule language has the effect of circumventing the Corps of Engineers nationwide permit for up to three (3) acres of wetland disturbance. A wetland as small as one-tenth (0.1) acre will require a complete permit investigation even though the primary regulatory agency, the Corps of Engineers, would grant a permit-by-rule for this type of small project. (WM)

Response: IDEM disagrees. Currently, all wetland impacts reviewed by IDEM are subject to possible mitigation requirements. This requirement has had no effect on IDEM =s ability to process requests for certifications. Furthermore, recently adopted Corps of Engineers policy regarding wetland impacts states all impacts greater than one-tenth (0.1) acre will require mitigation. In addition, the Corps of Engineers has revised the maximum impact to wetlands that could be authorized under a general permit to one-half (0.5) acre. This is significantly less than a three (3) acre limit. IDEM is consistent with federal requirements.

Comment: A completeness review notification should be included in 327 IAC 17-2-1(d) to require IDEM to notify an applicant within thirty (30) days of receipt of application that the application is not complete. (SIGECO)

Response: IDEM does and will continue to contact applicants regarding application issues by phone as soon as issues arise in the review process. IDEM currently reviews over ninety percent (90%) of applications for water quality certification within sixty (60) calendar days of the receipt of an application. IDEM will continue to maintain this review period for projects provided information is received in a timely manner and applications contain sufficient information for review. Placing an additional requirement for IDEM to serve formal written notice of its determination as to the application =s completeness will increase project review time; IDEM does not believe this would be beneficial.

Comment: It is suggested that IDEM provide a completeness review notification to an applicant within sixty (60) days of receipt of a water quality certification application. It is suggested that the water quality certification review by IDEM coincide with the Corps of Engineers = review and be limited to a maximum of one hundred twenty (120) days so that projects are not delayed by regulatory uncertainties. (ICC, IMA, IDOT, AEP, IEU, NiS, NSWMA, WM, SIGECO,)

Response: IDEM does not believe such notification would be beneficial. In addition, IDEM does try to coordinate its review with the Corps of Engineers = review of a proposed project.

Comment: To be consistent with the language of 327 IAC 17-2-1(a), the term Acommissioner@ should be substituted for Adepartment@ in 327 IAC 17-2-1(d) and (e). (SDC)

Response: IDEM disagrees. The rule language is correct as written.

Comment: The phrase Aact upon@ used in 327 IAC 17-2-1(e) is ambiguous and should be replaced with Aissue its final decision@ to clarify what must be completed in the stated time frame. (SIGECO)

Response: This language is taken directly from the federal Clean Water Act and provides consistency between Section 401 of the Clean Water Act and the draft rules. The suggested change would serve no practical purpose.

Comment: An automatic waiver of water quality certification allowed according to 327 IAC 17-2-1(e) is objectionable. The fee may be appropriate to be waived if a water quality certification application is not acted upon by IDEM within a year, but there are many circumstances including inadvertent mistakes that might cause this waiver to take effect for a project not deserving of certification. The largest projects with the greatest potential to significantly degrade wetlands are the ones most likely to escape thorough review under this waiver possibility. If IDEM has the resources to properly implement these rules, delay causing the failure to render a water quality certification decision should not occur without good reason. (DCAS, GIW, HEC, IWL, SCCC, SDC, SDCF, VWI)

Response: This language reflects Section 401(a) of the Clean Water Act.

Comment: If a water quality certification is waived according to 327 IAC 17-2-1(e), is this an action that could be appealed? (SDC)

Response: This has never been definitively decided by a court or the Office of Environmental Adjudication, but it appears to be an appealable decision. However, if the one (1) year time period for issuance of certification has passed, it is not clear that the party appealing the waiver would have a remedy.

Comment: The entirety of 327 IAC 17-2-2 except subsection (g) should be deleted from the draft rule. If a water quality certification is not intended to be a permit, then public notice should only be required for water quality certifications relating to federal permits that require notice and comment, such as Corps of Engineers individual permits. As well, IDEM should coordinate a public notice and requests for comment with the appropriate federal agency. (SIGECO)

Response: IDEM is required by Section 401 of the Clean Water Act to public notice the receipt of all applications for water quality certification. IDEM may not draft rules that do not contain this requirement because to do so would violate the mandates of the Clean Water Act and deny public participation in the certification process. IDEM currently does and will continue to use U.S. Army Corps of Engineers public notices as notice of an application for certification where the applicant is applying for an individual Corps permit.

Comment: The contents of a public notice should include under 327 IAC 17-2-2(b)(4) the eleven (11) and fourteen (14) digit hydrologic unit identification for the location of the project. (HEC)

Response: IDEM agrees and has modified the draft rule to require that the fourteen (14) digit hydrologic code be stated in each public noticed prepared by IDEM.

Comment: The proposed project description information required under 327 IAC 17-2-2(b)(5) should include identification of the nationwide permit number, where applicable, that applies to the project submitting a water quality certification application. (DCAS, IWL, SCCC, SDCF, VWI)

Response: IDEM provides information on the public notice that allows recipients to determine the location of the project, the scope, and potentially affected waterbodies in addition to the responsible persons or parties applying for certification. There is limited room on the form, and information on the type of nationwide permit or regional general permit may be obtained from the U.S. Army Corps of Engineers and is unnecessary for IDEM to include on the public notice.

Comment: The draft rule should contain language somewhere that IDEM will not process an application without knowledge of the nationwide permit from the Corps of Engineers under which the project is qualified. (IWL, SDCF)

Response: IDEM generally does not render a final agency decisions without specific knowledge of the nationwide permit under which the project is qualified.

Comment: Under the requirement of 327 IAC 17-2-2(b)(5)(D), are any of the following considered an impact: (1) ATulloch@ exempt excavation; (2) mowing; (3) hand clearing of trees in wetland or upland? Is an impact under this requirement different than a regulated impact consistent with Section 404 where an impact is defined as the placement of fill into wetlands, streams, or other waters of the state? (ES)

Response: All these listed examples are considered to be impacts to wetlands and other water resources. However, these impacts may not be regulated under Section 404 depending on how the activities are conducted. IDEM is authorized under Section 401 of the Clean Water Act to consider all impacts associated with a given project that requires a Section 404 permit or related federal permit or license. IDEM does not believe there is a definition of impact under federal law.

Comment: The comment period allowed under 327 IAC 17-2-2(b)(7) needs to be at least thirty (30) days rather than twenty-one (21) days to provide a reasonable time taking into consideration mail delays and citizens : needs to obtain more information in order to make informed comments. (DCAS, HEC, IWL, SCCC, SDC, SDCF, VWI)

Response: IDEM disagrees. IDEM has been public noticing projects that require water quality certification for two (2) years and has found that the comment period of twenty-one (21) days is reasonable and provides ample opportunity for comment.

Comment: Local units of government should be included at 327 IAC 17-2-2(c)(3) for receipt of notice from the department when an application for a water quality certification is submitted to IDEM. (HendCo)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: 327 IAC 17-2-2(d) unfairly places a specific deadline of fourteen (14) days as a requirement on an applicant to provide written response to comments but places no requirement on IDEM for its role in the process. (IDOT)

Response: The rule provides the applicant an opportunity to request additional time to respond.

Comment: If an applicant fails to provide a written response to comments received, then the rule should require that IDEM shall deny the application. (SDC)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: 327 IAC 17-2-3 concerning notification to adjacent states should be removed from the draft rule because adjacent states should not be afforded treatment that is different from what is given the citizens of Indiana. (NSWMA, WM)

Response: This language is taken directly from Section 401 of the Clean Water Act. This process is dictated by the Act, and IDEM may not ignore, remove, or modify this process.

Comment: 327 IAC 17-2-4 needs to specify a time frame for requesting a public meeting or hearing, holding a public meeting or hearing, receiving comments, and reviewing comments. (NSWMA, WM)

Response: IDEM has modified the draft rule language to indicate that a request to hold a public meeting must be submitted during the comment period. IDEM will hold the hearing or meeting and review comments before a final decision is made on the proposed project. Written comments that are submitted in response to the public meeting or hearing must be received by IDEM within fourteen (14) days of the date of the meeting or hearing.

Comment: According to 327 IAC 17-2-4, is there a level of meaningful or legal difference between a public meeting and a public hearing? Does a public meeting have less legal significance than a public hearing? (IWL, SCDG, SDC, SDCF)

Response: A public hearing has to be recorded, but a public meeting does not. Additionally, a public hearing concerning a

water quality certification must allow opportunity for comments, but those comments do not necessarily have to be respond to at the hearing. Public meetings are generally more informal, and IDEM generally makes a presentation and tries to answer questions at them.

Comment: 327 IAC 17-3-1 should be revised to allow an applicant to submit documentation to prove that a wetland use presumed to exist according to 327 IAC 2-1.8-3 does not exist. (HendCo)

Response: The wetland uses as described in 327 IAC 2-1.8-3 are written so that any area meeting the definition of a Awetland@ as set forth in these draft rules contains, by default, all designated uses. These uses define the basic physical, chemical, and biological properties of a wetland. IDEM believes that virtually all existing wetlands support the designated uses to varying degrees; therefore, it is necessary to modify the rule.

Comment: The presumption according to 327 IAC 17-3-1 that all the uses listed in 327 IAC 2-1.8-3 exist is overly broad. According to the 1987 Corps of Engineers Wetlands Manual, the threshold criterion for wetland hydrology is saturation to the surface for at least five percent (5%) of the growing season; thus, under this definition, wetland habitat would not actually be available for some of the designated uses included in the draft rule. All of the aquatic organisms listed in subdivision (1) should be deleted as designated wetland uses. The uses listed in 327 IAC 2-1.8-3(5) should be deleted because they could only exist if the public has access to a wetland and do not apply to privately owned wetlands. Furthermore, designated uses such as Ascientific@ and Aeducational@ are inappropriate for any wetland because these terms are undefined, unrelated to water quality, and are not part of the federal program elements for designated uses. (IMA)

Response: Though a given wetland may be saturated for only five percent (5%) of the growing season, this does not preclude the wetland from providing wetland habitat. In fact, some wetland species are dependent on these fluctuating hydrologic conditions. IDEM has modified the designated uses regarding aquatic organisms. In addition, IDEM has removed Ascientific@ and Aeducational@ as designated uses because these uses are captured in the remaining designated uses. The uses listed in 327 IAC 2-1.8-3(5) apply even if the public does not have access to the wetland.

Comment: The language of 327 IAC 17-3-2(a) should be enhanced to read as follows: AAn applicant shall consider all feasible and prudent alternatives.... @. (IDOT)

Response: The language as written is consistent with federal guidelines and provides a uniform review on both state and federal levels.

Comment: Subdivisions (1) and (2) of 327 IAC 17-3-2(b) should be reversed in order for the sake of process since it is only logical that a review of water dependency should come before an evaluation of alternatives. (SDC)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: 327 IAC 17-3-3 and 327 IAC 17-3-4 refer respectively to water dependent and nonwater dependent projects impacting a Tier I wetland, but the draft rule has provided no definition for these type projects. Who makes the determination of water dependency and is the entire project or just the project in the area of the impact considered? A road project may or may not be water dependent in specific locations. (IDOT)

Response: A definition for water dependency is stated at 327 IAC 17-1-4(25). IDEM will make the determination of water dependency and will evaluate the project in the area where the impacts are located, as well as the entire project. Projects may have segments that are water dependent and other segments that are not.

Comment: Why don=t 327 IAC 17-3-3 and 327 IAC 17-3-4 list avoidance as the first consideration in the review process for both water dependent and nonwater dependent projects impacting a Tier I wetland or other waters of the state? (SDC)

Response: Water dependent projects must, as a basic purpose, require siting or location on or within water. Therefore, it is unreasonable to assume that impacts can be avoided to water resources. It is reasonable to assume that a project can be configured, for example, to minimize impacts, such as relocating along a shoreline, to avoid certain wetlands, or reduce

the amount of fill needed to construct foundations.

Comment: The serious study of wetlands is barely thirty (30) years old; therefore, the expectation that an applicant or even the combined efforts of IDEM, IDNR, and EPA could properly determine the individual, secondary, and cumulative impacts of a project on a wetland. Without ability to determine these impacts as required by 327 IAC 17-3-4(f)(5), judgement cannot be made to show if an applicant has minimized impacts. (Smol)

Response: IDEM disagrees. Although wetlands continue to be researched and new information is continually being gathered, this does not preclude IDEM from evaluating all potential impacts based on current information. IDEM works closely with federal, state, and local agencies to develop a complete picture of potential impacts a given project may have on the aquatic environment.

Comment: The link made in 327 IAC 17-3-3(c) to 327 IAC 17-4 has made the water quality certification process into a two (2) step process if IDEM makes a determination of significance. There is no definition of Asignificant impact@ anywhere in the draft rule. (IDOT)

Response: The link provided in the draft rules does not change the current process; it merely means that IDEM will review the project to determine if compensatory mitigation will be required just as IDEM currently does on all applications for water quality certification.

Comment: How is a determination made if a practicable alternative presumed to exist under 327 IAC 17-3-4(a) creates a significant impact to something else such as homes or wooded areas? (IDOT)

Response: In the assessment of alternatives, IDEM is required to consider only the impacts of the project on water quality. Other alternatives that may impact homes, wooded areas, or other non-aquatic sites may be viable alternatives provided the alternative does not cause a significant impact to wetlands or other waters. The Corps of Engineers, in its review of these projects, considers the effect of alternatives on other resources.

Comment: It is recommended that alternatives analysis be required only for impacts to an OSRW. To require such an analysis for nearly all nonwater dependent projects for Tier I impacts is unreasonable without regard to impact size or short term projects covered under the nationwide permitting process. (JFN, NiS, ES)

Response: IDEM disagrees. IDEM, USEPA, and the Corps of Engineers use the same criteria to assess wetland impacts. All the agencies agree that wetland impacts are presumed to be avoidable unless alternatives do not exist. IDEM uses this criterion currently when evaluating water quality certification applications, and the draft rule merely spells out this requirement. All projects that require a site-specific water quality certification are held to this standard now and will be held to this standard under the draft rules. Applicants covered under a nationwide permit for which IDEM has granted certification are not required to conduct the alternatives analysis.

Comment: Has IDEM made an estimate of the number or percent of Tier II wetlands present in the state particularly in northwest Indiana where the burden of not being able to impact these wetlands will be very heavy? It is recommended that Tier II wetland protection be lessened from what is provided in the draft rule. Only an OSRW should be given this great level of protection. (JFN, NiS)

Response: IDEM has not estimated the acreage of Tier II wetlands in the state, but the fact that these wetland types are considered rare and unique by IDNR indicates that they make up a small percentage of the total wetland acreage of Indiana. All wetland types occupy less than four percent (4%) of the total surface area of Indiana. There is no prohibition on impacts to Tier II wetlands anywhere in the draft rules. There is a higher standard of review and a requirement to demonstrate socio-economic reasons for impacting a Tier II wetland; this does not preclude the possibility that IDEM would permit impacts to Tier II wetlands.

Comment: If the designation of Tier II wetland is to exist at all and meaningfully indicate a very rare and fragile system deserving to be saved, then there should be no reason sufficient to allow impact of any type at any time to these wetlands;

otherwise, the whole process of this rulemaking has been a futile exercise and waste of taxpayer =s money. (Smol)

Response: IDEM disagrees that Tier II wetlands should be completely restricted in the manner suggested. Wetlands placed in the Tier II class gain an added level of protection and regulatory review. However, IDEM recognizes that, in limited circumstances, there may be important social or economic reasons to consider impacts to these waters and has provided these provisions in the draft rule.

Comment: Of the five (5) factors IDEM is to consider to determine whether practical alternatives are applicable to avoid impacts to a Tier II wetland, the factors listed in 327 IAC 17-3-5(e)(1) through (4) are out of the range of expertise of the water quality staff of IDEM. IDEM should bring in independent and informed expertise in regional economic development and construction decision matters when the information on alternatives provided by an applicant is not acceptable to IDEM. (Gary)

Response: IDEM disagrees. IDEM currently considers project alternatives as described in 327 IAC 17-3-5(e). IDEM =s chief responsibility in considering alternatives is to evaluate potential impacts on water quality. Therefore, alternative sites, configurations, and other project modifications are evaluated by IDEM to determine if there would be associated impacts to water quality. An applicant must decide if various alternatives will result in less impact and still allow the goals of the project to be met. Available and viable alternatives must, therefore, satisfy water quality concerns and project purposes.

Comment: Please clarify what is a conditional use permit that is referred to in 327 IAC 17-3-4(e)(5) and 327 IAC 17-3-5(e)(5). (SDC)

Response: IDEM has removed this language from the draft rule because the language did not serve to clarify the noted sections.

Comment: The review burden to both an applicant and IDEM and the economic hardship of the requirements of 327 IAC 17-3-5 concerning impacts to Tier II wetlands is significant in light of the apparent lack of data to justify the use of 327 IAC 2-1.8-7(a)(2) and (3) to define Tier II wetlands. (ES)

Response: 327 IAC 2-1.8-7(a)(2) and (3) referred to criteria to classify a wetland as an outstanding state resource water or an outstanding national resource waters. A Tier II wetland is described at 327 IAC 2-1.8-4(2). Criteria for designating OSRWs has been removed from section 7 of the draft rule and will be addressed in the rulemaking conducted to implement SEA 431.

Comment: The amount of additional time required of an applicant who may impact a Tier II wetland to prepare an antidegradation demonstration according to 327 IAC 17-3-5(h) is of concern. How much additional time does IDEM believe this antidegradation demonstration will add to the issuance of a certification? (IMA)

Response: IDEM believes most if not all applicants will either coordinate with IDEM before applying for certification to determine the need for a demonstration or will prepare one before submittal of an application. Therefore, IDEM believes this requirement will not significantly affect the review time of applications that require an antidegradation demonstration.

Comment: An antidegradation demonstration is required for assessing impacts to a Tier II wetland according to 327 IAC 17-3-5(h), but no where does the rule require an antidegradation demonstration to be provided for impacts to a Tier I wetland. Why is this requirement not also applied to Tier I wetland impacts? (SDC)

Response: An antidegradation demonstration is not required for all waters, only high quality waters. IDEM is treating Tier II wetlands as high quality wetlands and is requiring an antidegradation demonstration only for these wetlands. This is comparable to the antidegradation rules that apply to high quality waters within the Great Lakes basin according to 327 IAC 2-1.5-4 and 327 IAC 5-2-11.3.

Comment: An antidegradation demonstration required by 327 IAC 17-3-5(h) should also include an evaluation of the

historic and existing wetlands in the county. The historic wetlands should be listed in general and evaluated with reference to the specific type and quality of the wetland to be degraded. (IWL, SDCF)

Response: IDEM disagrees. Listing of historic wetlands in the county is not a practical or feasible exercise, and the information would serve no purpose in the assessment of present-day impacts to water quality.

Comment: There is no relationship between the economic evaluations an applicant is required to make under 327 IAC 17-3-5(h) and issues of water quality. It would be helpful to have clarification for the inclusion of this requirement. (IDOT)

Response: Federal water quality standards regulations issued by EPA require states to maintain and protect high quality waters unless the state finds that the lowering of water quality is necessary to accommodate important economic or social development in the area. The criteria set forth in the proposed rule implement that standard.

Comment: The information requested in 327 IAC 17-3-5(h)(1) for an evaluation of baseline economic condition of a county where a project is proposed is dated and will not have much meaning. Economic analysis should be used only in cases where the project will directly affect it. (IDOT)

Response: IDEM is unclear as to the intent of the comment. A person or party preparing a socio-economic analysis must provide the most recent economic data as a part of this review.

Comment: Subsection (l) should be deleted from 327 IAC 17-3-5 to disallow IDEM from taking more time to request more information from an applicant who has submitted a complete antidegradation demonstration. IDEM should have a specified time such as sixty (60) days in which to review an antidegradation demonstration, make a completeness determination, and request any additional information needed. (SIGECO)

Response: IDEM disagrees. A requirement that IDEM communicate on these issues within a specific time period is unneeded and unreasonable. Antidegradation demonstrations will vary considerably based on the scope of the project and the potential impacts. Furthermore, IDEM is required to provide public notice of the receipt of an antidegradation demonstration and allow the public an opportunity to comment on it. Therefore, a single time frame for review may not allow adequate review of some demonstrations.

Comment: 327 IAC 17-3-5(h) specifies a time requirement placed on an applicant who must submit an antidegradation demonstration but no time frame for approval is placed on IDEM. The rule should establish a thirty (30) day review limitation placed on IDEM at each stage of the antidegradation demonstration approval process. (Gary)

Response: As previously stated, IDEM disagrees that a specified time requirement should be contained in the draft rule.

Comment: The important social and economic development that must be supported and the unacceptable environmental impact that must be avoided according to 327 IAC 17-3-5(m) before IDEM may approve an antidegradation demonstration is not an ascertainable standard. It is unclear how these criteria relate to water quality and environmental integrity. IDEM should consider exemptions for certain activities that cannot reasonably be included in an antidegradation process. For example, how can it be demonstrated that running a utility line through an area would support important social and economic development? This requirement of 327 IAC 17-3-5(m) should be clarified or removed from the rule. (IDOT, IMA, SIGECO)

Response: The concept of requiring a project to support important social and economic development in the area before authorization can be granted is based on federal regulation. Running a utility line would seem to be among the easier of ways to show that the standard is met though alternatives to running the line through a wetland may exist.

Comment: The requirement of 327 IAC 17-3-6 concerning the prohibition on an impact to an OSRW or an ONRW not lasting more than a year should specify that impact means both the direct disturbance to a wetland and any subsequent effects of that disturbance. The rule needs to clarify the extent of any impact that must be confined to within a year and

who is responsible for making the determination about the extent and duration of an impact. (DCAS, HEC, IWL, SCCC, SCDG, SDCF, VWI)

Response: IDEM has modified the rule to clarify that it will also consider secondary impacts of proposed projects in ONRWs. IDEM is responsible for making all determinations about potential impacts associated with a proposed project.

Comment: It is recommended that in Article 17 as well as in 327 IAC 2-1.8 ATier III@ should be used to refer to outstanding state and national resource waters to avoid the controversy surrounding the terms of AOSRW@ and AONRW@. Exceptional use waters may also include wetlands already equivalent to Tier III. Current rules protect all three (3) named waters without degradation. (SDC)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: 327 IAC 17-3-7 regarding the review of Corps of Engineers general permits should apply to new general permits proposed by the Corps of Engineers and not to existing nationwide permits that already have water quality certifications nor to individual preconstruction notices submitted under 33 C.F.R. ' 330.1. This is believed to be the correct interpretation of this section based in part on 327 IAC 17-5-3(b)(1) where it is stated that a water quality certification issued for a Corps of Engineers general permit is effective for the duration of the corps general permit. It is suggested that in concert with this section, some documentation of the intended meaning be created by IDEM and distributed to IDEM staff to avoid possible confusion. (Coal)

Response: The review provisions of 327 IAC 17-3-7 are to be applied when the Corps of Engineers proposes a general permit, such as in the case the general permit is either new or being renewed. These provisions would not apply when IDEM has already determined whether to issue or deny certification for a proposed general permit.

Comment: It is recommended that the draft rule language at 327 IAC 17-3-7(a)(1) be joined with the language in subsection (a) leaving subdivisions (2) and (3) as the options that IDEM may impose on a water quality certification. (IWL, SDCF)

Response: IDEM believes the draft rule is structured appropriately.

Comment: To eliminate unnecessary additional review and bureaucratic oversight of projects that are currently handled as an administrative matter by the Corps of Engineers and IDEM, 327 IAC 17-3-7 needs to be modified with the following recommended language: ANotwithstanding other provisions of this rule, the construction, installation, maintenance, or repair of facilities that are owned by a public water supply system, as defined at IC 13-11-2-177, shall not be limited or prohibited under this rule in excess of requirements imposed under Section 404 of the federal Clean Water Act or Section 10 of the River and Harbors Act.@. (IWC)

Response: IDEM disagrees. There is no practical need to exempt projects whose purpose is to support or continue the operation of a public water supply. Many of the activities listed in the suggested language are processed through Corps of Engineers general permits that have been granted water quality certification. This covers the majority of basic maintenance, repair, and installation of water supply structures. A categorical approval of all activities is inappropriate because a small proportion of these activities have the potential to adversely impact aquatic resources, and, in those cases, IDEM must assess the impacts to determine compliance with these draft rules.

Comment: IDEM clearly has the authority to deny a water quality certification for a general permit involving certain waters of the state, but the authority of IDEM to stop the Corps of Engineers from operation within its statutory authority as is presented in the draft rule at 327 IAC 17-3-7(b) is questionable. (SIGECO)

Response: IDEM has revised the draft rule language to accurately reflect IDEM =s authority. The modified draft rule language reads as follows: A(b) IDEM shall deny water quality certification for any proposed corps general permit that would authorize activities in the following waters: (1) A Tier II wetland. (2) An outstanding state resource water. (3) An

outstanding national resource water. (4) Exceptional use waters. (5) Designated salmonid waters. IDEM may issue a water quality certification for a proposed corps general permit provided the water quality certification contains conditions prohibiting the use of the corps general permit in the waters specified in subdivisions (1) through (5). @

Comment: Tier I wetlands should also be included at 327 IAC 17-3-7(b)(1). (SDC)

Response: IDEM disagrees. The draft rule provides adequate regulatory protection for Tier I wetlands. Restricting the use of well-crafted and appropriate corps general permits that authorize clearly minimal projects will increase IDEM =s workload and needlessly subject truly minor projects to extensive requirements.

Comment: What waters are the Awaters of special concern @? (SDC , ICC, IDOT, IMA, SIGECO)

Response: The term Awaters of special concern @ has been removed from the draft rule.

Comment: The public noticing provision of 327 IAC 17-3-7(c) seems redundant in light of the public notice required under 327 IAC 17-2-2. The goal of the general permits being to process them efficiently and quickly would be better served if water quality certifications for general permits are excluded from the public notice provisions. (SIGECO)

Response: The rule has been modified to clarify that the public notice provisions of 327 IAC 17-3-7 are to be applied when the Corps proposes a general permit, such as in the case that the general permit is either new or being renewed. The provisions would not apply when IDEM has already determined whether to issue or deny certification for a proposed corps general permit.

Comment: In general, the draft rules of Article 17 seem to be very good excepting the failure to address the issue of irreplaceability of high quality Tier I and Tier II wetlands by human creations. Mitigation sites, created wetlands, just cannot replace all the uses and functions of a high quality wetland. Some wetlands, such as high quality, ground water fed, diverse Tier I and Tier II wetlands simply should not be impacted. It is evident that the rules are meant to discourage wetland impact in general, but what is truly needed for these rules to effectively protect wetlands as the valuable resource that they are is less stringency for the biologically simple cattail type wetlands and much tougher rules for the irreplaceable biologically complex wetlands. (IWL, SCDG, SDCF)

Response: IDEM, in recognition of the difficulties in replacing many types of wetland, has included numerous safeguards in the draft rules for up-front mitigation, performance bonds, extended mitigation monitoring periods, and detailed success criteria to more effectively assure success of mitigation sites. These are mandatory for Tier II wetlands, but the commissioner has the discretion to require the safeguards for Tier I wetlands if it is believed to be necessary. Furthermore, the commissioner has discretion to consider other factors when evaluating the need for mitigation or to allow potential impacts to a wetland.

Comment: The entire concept of mitigation is to be opposed. In light of countless publications, such as the 1999 United States Geological Survey =s AThe Quality of Our Nation =s Waters, the 1999 APermitting Disaster in Indiana @ by the Sierra Club, and IDNR =s 1996 AThe Indiana Wetlands Conservation Plan, continued destruction of Indiana wetlands cannot be allowed when this resource, now reduced to less than fifteen percent (15%) of its former extent, is so little understood and yet to be fully described. What evidence is there to show that mitigation sites developed in the last ten (10) years have been successful in more than a slim minority of instances, have reconstructed wetlands that are in all ways identical to the lost wetlands, or that water quality certifications issued with mitigation requirements truly had no alternative options. The economic bonus to the few individuals who destroy wetlands cannot outweigh the serious and long term economic consequences of wetland destruction. (Smol)

Response: IDEM recognizes that there have been shortcomings with mitigation. Some of these have been overcome as the science of wetland restoration has progressed. IDEM is currently underway with a three (3) year study of ten (10) years of wetland mitigation sites to determine if sites are completed, how successful the mitigation is at recreating lost wetlands, and determining what methods are most effective at recreating wetlands. IDEM is investigating and will continue to bring mitigation sites into compliance with conditions of water quality certifications and has drafted rules that emphasize

consideration of alternatives with a strong emphasis on avoidance.

Comment: The one-tenth (0.1) acre specified in 327 IAC 17-4-1(b) should be increased to at least one (1) acre. Requiring mitigation for such small impacts will be unduly expensive and will cause undue delays at IDEM. (SIGECO)

Response: IDEM disagrees. Currently, all wetland impacts reviewed by IDEM are subject to possible mitigation requirements. This requirement has had no effect on IDEM ::s ability to process requests for certifications. Furthermore, recently adopted Corps of Engineers policy regarding wetland impacts states all impacts greater than one-tenth (0.1) acre will require mitigation. This means IDEM is consistent with federal requirements.

Comment: No compensatory mitigation should be required for wetland impacts less than one-tenth (0.1) acre. This is a truly minimal wetland loss that will be offset by compensatory mitigation projects having ratios greater than 1:1. Most of these small projects are fills done by homeowners, farmers, and small business people who are least able to afford the extra expense of mitigation. (AEP, Wiehr, HendCo, IDOT)

Response: IDEM is requiring compensatory mitigation only for Tier I wetland impacts less than one-tenth (0.1) acre if the impact will have a significant impact on water quality.

Comment: 327 IAC 17-4-2 describes criteria that must be met before impact will be allowed to a Tier II wetland, but who decides and by what method of evaluation if a mitigation site has met the success criteria that are later described in these rules? Is the submission of monitoring reports and some site visits conducted by unspecified individuals what will be the basis for determining if a mitigation site has reached the necessary functional requirements? (Hasty)

Response: Success criteria will be specific to each individual site due to the variation between wetland types and between individual wetlands of a given type. The clearest method for determining success occurs in the case of up-front mitigation. In this case, both the proposed impact site and the offered mitigation site exist at the same time. It will be up to the applicant to prove that the mitigation offered is the equivalent, both in terms of uses and quality, of the proposed mitigation. Methods that are not scientifically and statistically acceptable will be discarded. Most importantly IDEM can actually see the mitigation and compare it to the impact site before impacts are allowed.

Comment: A demonstration required by 327 IAC 17-4-2(1) is impossible because the existence of organisms in a habitat for a single season is a not a truthful indication of successful transfer to a compensatory mitigation site. A number of seasons is necessary to show reproductive viability under varying conditions. (Smol)

Response: The draft rule language does not state that monitoring will occur for only a single season. In order to prove that a Tier II compensatory mitigation site is successful, the applicant will have to provide proof to IDEM in the form of comparative statistics that the two (2) areas are statistically similar.

Comment: 327 IAC 17-4-3 will significantly increase the IDEM ::s work load and place a hardship on an applicant. This section could require the IDEM to review almost all bridge and culvert replacement done by all highway departments in Indiana even if no wetland is involved just so the local agency knows that IDEM agrees there is no significant impact on water quality. As well, these projects could be delayed up to a year waiting for IDEM ::s determination. Practical limits should be included in the rule using, for example, watershed sizes, opening sizes, or amount of disturbed area or, if exemptions are not acceptable, general permits could be developed in the same manner used by the Corps of Engineers in order to remove the application filing requirement and subsequent review. (HendCo)

Response: IDEM has developed general permits with the Corps of Engineers that allow for minimal review by IDEM and greatly reduced administrative requirements by applicants. These corps general permits focus on replacement and repair of existing structures where IDEM has observed through numerous years of review that these projects have no adverse impact to the environment, subject to limitations. In addition, 327 IAC 17-4-3 requires mitigation at the discretion of IDEM and is not mandatory on all projects that fall in the this category. Corps general permits will greatly reduce administrative burden, reduce review on truly insignificant projects, and allow IDEM to focus its resources on larger, significant projects.

Comment: 327 IAC 17-4-3(a) as it is drafted does not make sense. (SDC)

Response: IDEM has modified the draft rule language at this citation to read as follows: ASec. 3. (a) If compensatory mitigation is required by the department for an impact to a water of the state that is not a wetland, then the compensatory mitigation must:

(1) be approved by the department; and

(2) replace the existing and designated uses of the adversely affected water in accordance with the conditions contained in the water quality certification issued to the applicant. @.

Comment: What is meant by and the difference between Arelocation @ referenced in 327 IAC 17-4-3(b)(1) and Ashaping or other alteration @ referenced in 327 IAC 17-4-3(b)(2)? Is widening, moving slightly, total new alignment, or converting a ditch into a legal tile considered to be relocation? Restoration work and projects that can be proven to have a positive impact on habitat and water quality should be exempt from mitigation requirements. What is included under the term Aditch channel @? According to 327 IAC 17-4-3(b)(4), is a borrow pit along the interstate or a gravel pit considered to be an open water site of waters of the state? The type of mitigation required for each of the activities listed in 327 IAC 17-4-3(b)(1) through (4) needs to be specified. (IDOT, JFN)

Response: IDEM has modified the draft rule to include the following definitions: (1) AARelocation @ means the alteration of the flow line of a waterway, including new alignments, tiling, piping, or other related practices. @; (2) AAShaping or other alteration @ means the manipulation of streambanks to make the channel wider or narrower or an alteration of the slopes of streambanks.@; (3) AAChannel @ means the flowpath of a waterway, including streams, ditches, rivers, and other related water courses.@; (4) AAOpen water@ means areas of a wetland that are permanently inundated at mean annual water depths less than or equal to six and six-tenths (6.6) feet. These areas may contain little or no vegetation. @; and (5) AADeep water@ means areas that are permanently inundated at mean annual water depths greater than six and six-tenths (6.6) feet. These are areas that are not wetlands and may include lakes, rivers, ponds, and borrow pits. @

Comment: The rule=s requirement to provide mitigation even in instances such as those in 327 IAC 17-4-3(b)(1), (2), and (3) will prevent a person from undertaking a project that in changing or impacting other waters of the state will improve wetland habitat. The rules should make a distinction between headwater streams that do provide significant habitat, ecological diversity, and water quality benefits versus ephemeral drains such as ditches, erosion channels, and agricultural drains that may convey water but do not provide habitat nor water quality benefit, and in many cases, may actually degrade aquatic resources that were installed to drain. Enclosure of these ditch drainage facilities may improve water quality by preventing direct run off of sediment or nutrient laden waters and a project to do so should not be required to provide compensatory mitigation. (ES)

Response: IDEM disagrees. Undertaking a project that improves water quality within a wetland but degrades water quality in a stream or other water is in violation of the current and proposed rules governing water quality. Moreover, if a project were to be proposed and would improve water quality in a stream channel by restoring meanders, adding in-channel habitat structures, and planting riparian vegetation, IDEM would not require additional mitigation since the basic purpose of the project would provide a net increase in water quality. Furthermore, IDEM disagrees that enclosure of ditches or other so-called degraded channels has a net improvement in water quality. Enclosure of channels completely removes all in stream habitat for aquatic organisms, increases water velocities during rain events, hinders movement of aquatic organisms, and removes recreational uses; these impacts are considered violations of Indiana =s water quality standards.

Comment: The language of 327 IAC 17-4-2(1) and 327 IAC 17-4-4(a), as with 327 IAC 2-1.8-5(b)(2)(A)(iv)(BB), is illogical, impractical, and not a reasonable request because compensatory mitigation is required to be completed and proven successful as approved by the commissioner prior to any impact occurring to a Tier II wetland or a wetland where the applicant does not guarantee compensatory mitigation with a performance bond or irrevocable letter of credit. It would be considerably more efficient and beneficial to the cost of a project to do the wetland mitigation while proceeding with the wetland impact. Requiring an applicant to wait on the completion of a mitigation site before starting an impact to a wetland will add unnecessary costs to housing development or road project. This requirement should be optional for both Tier I and Tier II wetlands. A performance bond in concert with a higher mitigation ratio, combined with IDEM =s and

the Corps of Engineers= authority, is sufficient to insure that concurrently constructed mitigation is completed. (AEP, ICC, IDOT, IEU, IMA, NSWMA, SIGECO)

Response: Tier II wetlands are those wetlands that are rare and valuable and immensely difficult, if not impossible, to recreate through mitigation. While IDEM understands that the housing development community is concerned about costs, the goal of these rules and the Clean Water Act is to incur no reduction in the extent of wetlands that exist in the state. In recognition of the fact that few wetlands remain in Indiana and that those qualifying as Tier II wetlands are a mere fraction of those remaining wetlands, this rule imposes more stringent requirements before impacts to Tier II wetlands may be authorized. Studies of the success of replacing even Tier I wetlands have indicated that many sites have not successfully replaced the uses present in the impacted wetland. Advance completion of mitigation is not mandatory for impacts to a Tier I wetland and will not be required as a matter of course.

Comment: 327 IAC 17-4-4(a) seems to imply that impacts can be initiated before a mitigation site has been determined to be successful. This is contrary to what is stated in 327 IAC 2-1.8-5 and is confusing. Under what circumstances will impacts be allowed prior to successful completion of mitigation and why? (IDOT)

Response: IDEM has modified this section of the rule to clarify the point that mitigation must be successful before impacts are allowed if no financial assurances are provided.

Comment: If a performance bond or letter of credit is sufficient to guarantee mitigation in some cases, it should be applicable to all cases, including Tier II wetland mitigation, thus making the requirement for completion of mitigation prior to impact unnecessary. (Gary)

Response: IDEM disagrees. It is unnecessary to guarantee up-front mitigation with a performance bond or letter of credit because the mitigation must be complete and successful before impacts are allowed. This obviates the need to require financial assurances that the mitigation will be completed. Some wetlands, given the difficulty in reproducing the ecosystem or the important water quality they provide, must be replaced in advance of impacts in order to have complete protection of these important wetland types. Furthermore, bonds will not guarantee that Tier II wetlands may be or can be successfully replaced.

Comment: A state agency should not have to guarantee a performance bond or irrevocable letter as required by 327 IAC 17-4-4(a). (IDOT)

Response: IDEM disagrees. There is no reason to establish different standards based on a potential applicant =s status as a governmental agency. Performance bonding is an assurance that a given mitigation project will be completed and that IDEM has recourse to complete the mitigation if necessary.

Comment: The requirement to complete compensatory mitigation before an impact can occur to a Tier I or Tier II wetland should be removed from the draft rule as it does not in any way contribute to an improved success rate, but it would make impossible any development project that depends on competitiveness and a time sensitive completion. If the goal is to insure success in mitigation projects, then IDEM should implement a cooperative program of review, research, technical assistance, and monitoring of mitigation projects. This could be accomplished by a multi-agency team of state personnel with expertise in this field. (Gary)

Response: IDEM disagrees. By requiring mitigation to be up-front and proven successful, IDEM has complete assurance that the wetland mitigation has replaced wetland uses and water quality. The suggestion that AIDEM should implement a cooperative program of review, research, technical assistance, and monitoring of mitigation projects @ is useful and ties into IDEM=s commitment to improve wetland science through partnerships in research and exchange of ideas but does not improve mitigation success rates. Mitigation success rates will improve with properly planned sites and diligent construction techniques.

Comment: The up-front mitigation requirement for impact to a Tier II wetland conforms to the no net loss of wetlands policy and is not overly burdensome to the regulated community. The 1:1 mitigation ratio applied to impacts to a farmed

wetland and Tier II wetland should also be applied to any Tier I wetland that is mitigated through the use of a mitigation bank where the wetlands are already established. This would also be up-front mitigation of a Tier I wetland and should also be rewarded with a reduced mitigation ratio. (AEP)

Response: IDEM agrees that the up-front mitigation requirement for impact to a Tier II wetland conforms to the no net loss of wetlands policy and is not overly burdensome to the regulated community. Mitigation ratios for applicants providing compensatory mitigation through a mitigation bank will be established according to the bank charter issued to the bank sponsor and the individual certification issued to the applicant for Section 401 water quality certification.

Comment: What signifies Acompletion @ as required by 327 IAC 17-4-4(b)? If the mitigation site is built, is it complete or will monitoring be required? (IDOT)

Response: 327 IAC 17-4-4(b) states, AIn situations, other than described by subsection (a), where compensatory mitigation is approved by the department, it must be completed within one (1) year of the date of issuance of the water quality certification unless a written extension is granted by the commissioner. @. Completion in this context means that all activities associated with the construction of the mitigation site including, but not limited to, grading, construction of berms, planting, clearing of exotic vegetation, and restoration of hydrology must be completed within one (1) year of the date of issuance of a water quality certification. The mitigation site will still be subject to monitoring requirements spelled out in an approved water quality certification and detailed in 327 IAC 17-4-13 and 327 IAC 17-4-21. Completion does not have the same meaning as success.

Comment: Who decides and by what method of evaluation is a compensatory mitigation site has demonstrated success as required by 327 IAC 17-4-4? (Hasty)

Response: Due to the variation of wetland types and wetlands within individual types, as well as regional variations, individual success criteria will be established for each individual site based on what is to be lost and the goals of the mitigation. Methods to be used will vary according to the criteria to be measured. Though the applicant proposes methods to be used and criteria to be monitored, IDEM decides if these methods are appropriate before issuance of the Section 401 water quality certification. The applicant submits its monitoring in an effort to prove that the site is successful, but IDEM according to 327 IAC 17-4-13(b) makes the final decision as to whether the mitigation is successful and subsequent release from monitoring should be granted.

Comment: The eight (8), eleven (11), and fourteen (14) digit USGS HUC referenced in 327 IAC 17-4-5 for aiding in the determination of an acceptable compensatory mitigation site should be enhanced with language added to the draft rule relevant to subsections (b) and (c) to require that a mitigation site must be located as close to the site of impact as possible within the applicable watershed. (IWL, SDCF)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: To use the fourteen (14) digit USGS HUC referenced in 327 IAC 17-4-5 would be very good but they are not available. This requirement to use fourteen (14) digit USGS HUC could become a loophole in the rule to create delay. It is recommended that the USGS HUC that is available be used with the requirement to include data from the National Wetland Inventory, soils data, IDNR Heritage data base, geological survey data, and on-site inspection data. (IWL)

Response: The fourteen (14) digit USGS hydrologic unit codes referred to in 327 IAC 17-4-5 have been recently completed and are currently in use at IDEM. This information is available as a Geographic Information System data layer. IDEM considers such factors as data from the National Wetland Inventory, soils data, IDNR Heritage data base, geological survey data, and on-site inspection data to determine the viability of a proposed mitigation site.

Comment: The mitigation location requirements of 327 IAC 17-4-5 do not allow any flexibility for projects that do not have any practical sites available. (IDOT)

Response: IDEM disagrees. The draft rule has clear options for use of mitigation banks in cases where it is clearly

demonstrated that no practical sites are available for a given mitigation project. Furthermore, the geographic constraints still provide a degree of flexibility in locating appropriate mitigation sites. The draft rule does not confine applicants for certification to a single, inflexible path that would fail to allow for viable options and alternatives.

Comment: The draft rule language at 327 IAC 17-4-5(b) allowing IDEM to authorize off-site mitigation if the probability of success is low for on-site mitigation seems to concede defeat at an early stage. IDEM has put forth a great deal of effort to develop and eventually implement these rules particularly to ensure that mitigation projects do succeed; therefore, please strengthen the rule in this concern by stating that off-site mitigation may be allowed if on-site mitigation is not practicable as determined by IDEM. (IWL, SDCF)

Response: 327 IAC 17-4-5(a) clearly states, ACompensatory mitigation of impacts to waters of the state must occur, if practicable, on the same site as the project and its associated impacts. @. IDEM has modified this draft rule language to add the phrase Aas determined by IDEM@.

Comment: The use of a mitigation bank for off-site compensatory mitigation according to 327 IAC 17-4-5(b)(1) needs to require that the mitigation site be located within the eleven (11) digit watershed of the impacted waters. The eight (8) digit watershed encompasses too large an area to ensure adequate local compensation for the lost uses and functions of a destroyed wetland. (IWL, SDCF)

Response: IDEM disagrees. IDEM has worked closely with the EPA, USFWS, IDNR, NRCS, and the Corps of Engineers on mitigation banking, and the consensus is the eight (8) digit restriction is reasonable and protective of the environment.

Comment: Why does 327 IAC 17-4-5(c)(2) require offsite mitigation for a Tier II wetland to be located within the same USGS HUC fourteen (14) digit watershed as the project impact rather than within an eight (8) digit watershed? Closer may be better in some cases, but a potentially ideal site should not arbitrarily be denied because of location. The quality of wetland mitigation is closely tied to mitigation site quality and the use of an eight (8) digit watershed will result in better mitigation than on-site or smaller watershed restrictions. If anything, more latitude in selection of a compensatory mitigation site for a Tier II wetland should be allowed because it will be more difficult to find a mitigation site suitable to replace a Tier II wetland than a Tier I wetland. (ES, IDOT, JFN, NiS)

Response: According to 327 IAC 17-4-5(c)(2), offsite mitigation for a Tier II wetland is required to be located within the same USGS HUC fourteen (14) digit watershed as the project impact because these wetland types are found within very discrete areas of the state. The water quality benefits they provide, including habitat for wetland-dependent, threatened or endangered species, is highly important and cannot be adequately replaced within a large eight (8) digit watershed. The eight (8) digit watersheds span, in some cases, different ecoregions; allowing this area to be utilized for these projects could result in mitigation for wetland types in areas of the state where the wetland type has never existed. Although an eight (8) digit watershed would provide greater site selection, it would defeat the protections placed by these draft rules on Tier II wetlands that are recognized as being sensitive, high quality wetland areas.

Comment: 327 IAC 17-4-6 creates problems for state agencies other than IDEM. In the case of IDOT, a conservation easement does not take rights from the land owner but does specify what can and cannot be done on the land by the owner. IDOT may maintain a site during a monitoring period by means of a temporary easement; the conservation easement restrictions are placed on the landowners deed. The only change occurs when the site is deemed successful by the Corps of Engineer or IDEM. There is no formal transfer of land by or to the landowner at the time of success, but the draft rule does not address what happens when two (2) different agencies disagree concerning the issue of success of the mitigation site. (IDOT)

Response: In the case of a person or party acquiring access to a property to perform mitigation via a temporary easement, that person or party will be required by this draft rule to have the landowner modify the deed or enter into a conservation easement to protect the mitigation area after the temporary easement has expired. Even though property does not change ownership, the applicant will be required to demonstrate that this permanent protection has been placed on the mitigation site. IDEM will determine success of a mitigation site based on its rules. This does not supercede any other regulatory agency=s authority or responsibility, and an applicant must comply with all appropriate requirements from all agencies. The potential for agencies to disagree on the success of mitigation sites exists now, but the agencies are working together

to develop more of a consensus.

Comment: The rule at 327 IAC 17-4-6 needs to state that a document required to protect a compensatory mitigation site must be properly recorded. If a deed restriction is used, will it protect the mitigation site if the property is sold to a different owner? (IWL, SDC)

Response: IDEM will modify the draft rule to incorporate the suggested requirement that the deed be recorded. 327 IAC 17-4-6(a) requires that the mitigation site be protected in perpetuity. This means the deed restriction would be binding on subsequent owners.

Comment: The requirement of 327 IAC 17-4-6(a) that compensatory mitigation must be protected in perpetuity may discourage the expansion of mitigation sites, defeat meritorious land uses, and stifle the gain of wetlands. If the rule allowed a compensatory mitigation site to reenter the regulatory process, a one (1) acre site that were mitigated with a two (2) acre site might subsequently be mitigated with an offsetting eight (8) acre mitigation site thereby providing additional wetland acreage. Under the concept of perpetual maintenance, the example second project would be denied. (AEP, ICC, IEU, IMA, SIGECO)

Response: IDEM disagrees. Avoidance is the primary approach to maintaining Indiana =s scarce wetland resources. Only in limited circumstances should impacts to wetlands be allowed and mitigated. In addition to providing clear protection for these wetland mitigation areas, protection in perpetuity insures that present and future landowners are aware that a wetland exists on a given property and may take appropriate steps to work around this sensitive area.

Comment: The requirement of 327 IAC 17-4-6(a) that compensatory mitigation must be protected in perpetuity might be impractical should the property be sold with a transfer of liability. It should be considered if the site has stabilized as a wetland with preservation of its wetland status being the primary consideration and the binding criterion in a transfer of property. (IEI)

Response: IDEM does not understand the meaning of the comment.

Comment: An applicant =s responsibility to protect mitigated sites with Aa conservation easement held by a third party committed to conservation and maintenance of the property and its wetland existing and designated uses @, according to 327 IAC 17-4-6(a)(1), needs clarification. (IMA)

Response: IDEM is unsure what clarification is being recommended or requested as necessary.

Comment: The third party committed to conservation and maintenance of the mitigation site as required by 327 IAC 17-4-6(a)(1) needs to have by-laws or a mission statement that demonstrates this commitment. The draft rule also should clarify that conservation easements or deed restrictions are required components of any mitigation bank used for compensatory mitigation. (IWL, SDCF)

Response: IDEM does not believe it necessary to add language to the draft rule requiring a third party committed to conservation and maintenance of the mitigation site as required by 327 IAC 17-4-6(a)(1) to have by-laws or a mission statement that demonstrates this commitment. IDEM, however, may require such demonstrations of commitment if IDEM is unfamiliar with the third party. Compensatory mitigation bank charters are subject to the approval of the Mitigation Banking Review Team that is composed of EPA, IDNR, USFWS, NRCS, the Corps of Engineers, and IDEM. Protection of the these banks in perpetuity will be a requirement of any signed mitigation bank charter.

Comment: Is the requirement of 327 IAC 17-4-6(a)(2) necessitating an escrow account in addition to deed or conservation easements to be established to maintain a wetland mitigation site? Wetlands do change over time and the existing and designated uses today will not be the same in the future. It is one thing to protect a wetland from future development, but it is wholly another to dictate that succession or community change is prevented from occurring because of rule. (ES)

Response: 327 IAC 17-4-6 of the water quality certification rule refers to the need to protect a mitigation site with a

conservation easement or deed restriction. No reference is made to the need for an escrow account or other such financial assurance to maintain a mitigation site. IDEM is in no way dictating or advocating that wetlands be preserved or maintained in a static condition. Natural succession and variations of plant and animal communities are desired and not in any way regulated by these draft rules. Language referring to financial assurances for mitigation sites is found at 327 IAC 17-4-8 and specifically states that an applicant is released from the requirements of this section when a mitigation site is demonstrated to have successfully achieved all criteria and has been released by IDEM with a written notification. This section also does not refer to a need to have a perpetual account to maintain the wetland as a static entity.

Comment: 327 IAC 17-4-6(c)(2) should also require a copy of the deed restriction or conservation easement materials to accompany the written agreement between the recipient and the transferee. (IWL, SDCF)

Response: IDEM concurs and has modified the draft rule to reflect this change.

Comment: The requirement of 327 IAC 17-4-6(b) for a conservation easement or deed restriction to be submitted to IDEM within ninety (90) days of the issuance of the water quality certification will not be legally feasible in many cases. A project may be a year or more away from the wetland phase and from having a certification that would require having an easement or deed. (ES)

Response: IDEM agrees. IDEM has modified the rule language to extend the time period for submittal from ninety (90) days to one hundred eighty (180) days. In addition, IDEM has added a provision allowing an applicant to apply for an extension of time to comply with this portion of the rule.

Comment: The mitigation ratios based on vegetation types according to Table 7(a) in 327 IAC 17-4-7(a) are not defensible and should be replaced with a 2:1 ratio for all Tier I wetlands. A landowner may legally cut vegetation that can change a scrub/shrub or forested wetland into an emergent marsh. This is a preliminary step to altering a wetland but does not require a permit. How far into the past will IDEM search to determine what type mitigation will be required in compensation? Will the compensation be based upon the current wetland type being impacted or will it be based upon a type the wetland may have been long ago? Most Indiana wetlands were once forested so will all compensatory mitigation sites strive to return forested wetlands to Indiana? (AEP, ICC, IEU, IMA, SIGECO)

Response: The subject of mitigation ratios was discussed extensively during the workgroup meetings for these proposed rules. The ratios presented in this draft rule were a consensus decision of the workgroup and reflect ratios that are currently utilized by IDEM. IDEM thinks that five (5) years of information prior to the submittal of an application would be appropriate for use in determining the wetland type and the appropriate mitigation ratio.

Comment: The language of 327 IAC 17-4-7(a) may actually encourage an applicant to clear trees from a wetland before applying for a water quality certificate in order to affect the mitigation ratio required of the compensatory mitigation site. To say that any forested wetland is worth twice as much as any emergent wetland just because it has trees makes little sense. (JFN, NiS)

Response: IDEM has modified the definition of Aforested wetland@ to read as follows: AAForested wetland@ means a wetland dominated by woody vegetation that has a diameter, at breast height, greater than three (3) inches, regardless of total height. Wetlands that have been cleared of woody vegetation within five (5) years previous to the project will be considered forested wetlands by the department. @.

Comment: The use of incentive based mitigation ratios in 327 IAC 17-4-7 for advanced or enhanced mitigation such as for emergent wetlands, scrub/shrub, and forested wetlands are consistent with current standards. (ES)

Response: IDEM concurs with this statement.

Comment: The mitigation ratio of 1:1 established in 327 IAC 17-4-7 for a Tier II wetland is questionable. It is not likely that all functions or arbitrary values could be demonstrated within a five (5) to seven (7) year period which in effect will prevent an impact to a Tier II wetland listed in 327 IAC 2-1.8-7(a)(1). It is recommended that for mitigation required to be

completed prior to an impact to a Tier II wetland appropriate performance standards and milestones be established to demonstrate vegetative, hydrologic, and water chemistry parameters but at a higher ratio of 1.5:1 or 2:1. (ES)

Response: IDEM disagrees. IDEM requires the replacement of all wetlands to meet many criteria. For example, the replacement wetland must meet the criteria set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual, replace all designated and existing uses from the original wetland, and replicate the wetland type impacted. If a wetland mitigation site does not meet the success criteria, monitoring may be extended until such time as the criteria are met. Increasing the ratio in no way hastens success or increases the chance of success of the mitigation site.

Comment: The mitigation ratio of 1:1 established in 327 IAC 17-4-7 for a Tier II wetland is inadequate. Even successful completion of a compensatory mitigation site for two (2) years may not be sufficient time for the uses and functions of the lost wetland to be completely replaced. It may be decades or never before a replacement wetland is functioning as a natural wetland or providing similar habitat for sensitive species or communities. Tier II compensation should be at the same ratios as Tier I. (DCAS, GIW, HEC, IWL, SCCC, SDC, SDCF, Smol, VWI)

Response: IDEM disagrees. There is no reason to require higher mitigation ratios if mitigation is completed in advance of impacts and proven successful. This standard insures complete protection for high quality wetlands, full compliance with the draft rules, and no net loss of wetlands. The rule clearly states that wetlands will not be released from monitoring until they are proven successful. This time frame will be different based on the wetland to be mitigated.

Comment: Any project approval requiring compensatory mitigation should be no less than a minimum ratio of 2:1. The ratio should be increased for higher quality wetlands, and no project should be approved that would impact wetlands that are home to threatened and endangered species. IDEM must guarantee that it has the funding and staff capable to undertake the necessary monitoring of mitigation sites so that wetlands are not destroyed while mitigation sites either do not get built or if built do not provide comparable wetland benefits as did the original wetland. (GIW, IWL, SDC)

Response: IDEM disagrees. Mitigation ratios have been set after consultation with EPA, IDNR, USFWS, NRCS, and the Corp of Engineers. Tier II wetlands are considered to be higher quality and areas that can contain endangered species; therefore, they must be replaced and proven successful prior to impacts. This insures these areas are adequately protected. It is important to note that not all applications for certification are approved.

Comment: The compensatory mitigation ratios contained in Table 7 should apply only to mitigation projects that are in-kind and on-site; otherwise, higher ratios must be required for other types of mitigation. Are the types of mitigation listed in Table 7 all understood to be Tier I if they are not Tier II? A 1:1 mitigation ratio for a Tier II wetland does not ensure protection of these higher ranked wetlands. The feasibility of creating a Tier II wetland is questionable, and restoration or preservation alone will result in a net loss of wetland. (DCAS, GIW, IWL, SCCC, SDC, SDCF, VWI)

Response: Wetland mitigation, as detailed in this draft rule, must be in-kind replacement of impacted wetlands both by type and supported uses. IDEM disagrees that ratios should be increased for off-site mitigation. There are many valid reasons for performing mitigation off-site. Table 7 is arranged to distinguish between Tier I and Tier II wetlands. A wetland of any type that qualifies as a Tier II has an established ratio provided in Table I. All other wetlands that are not Tier II are Tier I and have ratios established in Table 7 according to vegetation types. IDEM disagrees that the ratios for Tier II wetlands should be changed, as the rule provides ample safeguards and assurances that if wetland mitigation is not successful, then impacts to a Tier II wetland will not proceed. The draft rule states that preservation by itself is not acceptable compensatory mitigation. A definition for Arestoration@ has been added to this draft.

Comment: A compensatory mitigation ratio of 1:1 is established in 327 IAC 17-4-7(a) for farmed wetlands; however, the draft rule contains no definition of what is a farmed wetland. Documents other than these draft rules seem to indicate that a farmed wetland is an area that is not now a wetland but might have been a wetland or become a wetland if the drainage systems were not maintained. If this is what a farmed wetland is then these draft rules require a 1:1 mitigation of something that does not exist and depends entirely on someone =s speculation about the limits of this nonexistent wetland and its condition. A local public agency could not know what mitigation is required without making an application to IDEM and would then have to face a possible one (1) year delay for IDEM determination. The rule should not require mitigation for something that does not exist. (HendCo)

Response: The prior draft of the rule erroneously used the definition of Aprior converted wetlands@ in lieu of the definition of Afarmed wetland@, but the draft rule for preliminary adoption has corrected this error.

Comment: How can a farmed wetland be replaced in kind? (IDOT)

Response: AFarmed wetland@ is a legal term not a functional wetland type. In-kind mitigation, while preferred in many cases and essential in the case of Tier II wetlands, is not appropriate or desirable for farmed wetlands. In most mitigation cases, the applicant must look for a location where a wetland of the functional type lost once existed and can be restored. In the case of the farmed wetland, the site may be degraded past recognition. In this case, virtually any healthy wetland of a type appropriate for the area would be adequate compensation.

Comment: The compensatory mitigation ratios of 327 IAC 1 7-4-7 provide the most glaring example of how the rule does not distinguish between high quality, complex wetlands and the more simple types. Table 7 requires no more mitigation for a Tier II wetland than for a very biologically degraded farmed wetland. Tier II and the high quality Tier I wetlands should have very high mitigation ratios, on the order of 10:1 or higher, to reflect that they cannot be recreated in the same quality as the original wetland. (IWL, SCDG, SDC, SDCF)

Response: The only compensation for a Tier II wetland is another Tier II wetland of the same type and quality. The ratio of 1:1 for Tier II wetlands is set at this level because mitigation must be up-front and proven successful before impacts to the Tier II wetlands may occur. The purpose of ratios is to compensate for the temporal lag between the destruction of the impact site and the success of the mitigation site and to offset inevitable mitigation failures. For Tier I wetlands, an additional consideration is the risk of failure since up-front mitigation generally will not be required for those wetlands. There is no time lag or risk of failure if the mitigation is done up-front and proven successful so there is no need for a 10:1 ratio. If the mitigation site can not achieve the same quality of the original wetland it will not be considered successful, and IDEM will not authorize the impact to occur.

Comment: The compensatory mitigation ratio in Table 7(a) for scrub/shrub mitigation should be 2:1 instead of 3:1. (NSWMA, WM)

Response: IDEM disagrees. This ratio is consistent with current requirements from the Corps of Engineers, Indiana department of natural resources, and IDEM. Changing this ratio would render this draft rule inconsistent with current policy and requirements set forth by the involved agencies.

Comment: What is the reasoning behind the various ratios contained in Table 7(a). The reason the different types of wetlands to be impacted are given different compensatory mitigation ratios needs to be explained. (IEI)

Response: The risk of mitigation failure and temporal lag between the wetland loss and the maturation of the mitigation site necessitates ratios. Shrub communities take longer to mature than emergent communities. Forested communities require still more time to mature. Consequently, shrub communities need to be replaced at a higher ratio than emergent, and forested communities should require higher ratios than shrub.

Comment: If IDEM remains unwilling to accept more reasonable mitigation ratios than are presented in draft rule Table 7(a), then the ratios of that table should be used as a guideline of the maximum required ratios and applicants should be allowed to negotiate lower ratios. In the minimum, IDEM needs to provide the technical or legal basis for the mitigation ratios listed in Table 7(a); it appears they are based on mitigation ratios adopted by IDNR, but no reference to the Corp of Engineers is given. (IEU)

Response: The mitigation ratios listed in the draft rule are consistent with ratios utilized by the Corps of Engineers and Indiana department of natural resources. IDEM specifically consulted with these two (2) agencies to develop rules that are consistent from agency to agency. The rule, according to 327 IAC 17-4-7(b), provides for some flexibility in the determination of mitigation ratios.

Comment: The allowance provided in 327 IAC 17-4-7(b)(1) for a reduction of mitigation ratio for disturbed sites should be much greater especially if the site is an artificial water body. Mitigation ratios should be reduced to as little as 1:1 or that analogous to a farmed wetland if an appropriate demonstration of reduced function can be supplied by the applicant. (JFN)

Response: IDEM disagrees. The purpose of the rule is to provide clarity and consistency in the implementation of review procedures. Additionally, there is no legal basis for treating artificially created wetlands differently than naturally created wetlands. If IDEM were to modify the draft rule as suggested, mitigation ratios would be set on a case by case basis since many wetlands in Indiana exhibit signs of disturbance and alteration.

Comment: 327 IAC 17-4-7(b)(2) is not clear as to when it is permissible to impact a wetland prior to completion of mitigation. Permit holders must have started the wetland impacts prior to expiration of a water quality certification and a nationwide permit; therefore, how can a permit holder complete the mitigation which may take five (5) years in advance of the impacts. What assurance does an applicant have that a project will be certified with a lowered mitigation ratio? A mitigation ration that Amay@ be lowered to 1:1 should be stated with more certainty as in Awill@ be lowered. (ES, IDOT, JFN, NiS)

Response: Applicants do not need a Corps permit or a Section 401 water quality certification prior to performing wetland mitigation provided they are not mitigating in a jurisdictional water. IDEM would issue the certification after the mitigation was shown to be successful. However, applicants should consult with IDEM prior to initiating the up-front mitigation and provide the appropriate documentation that the area is not already a wetland. IDEM cannot make any assurance that ratios will be lowered because IDEM will make this determination on a case by case basis.

Comment: The reduction amounts given according to 327 IAC 17 B4-7(b)(1) and (2) should be much greater if an applicant can supply an appropriate demonstration of reduced function in the disturbed site that is to be impacted. (NiS)

Response: The draft rule language of 327 IAC 17 B4-7(b)(1) and (2) are appropriate. Any further reductions in ratios would violate IDEM=s goal to meet the national policy of no net loss of wetlands and would potentially result in adverse impacts to water quality.

Comment: The possibilities for a decrease of a compensatory mitigation ratio provided by 327 IAC 17-4-7(b) are commendable and should be expanded by enumerating additional improvements, such as diverse habitat types, upland buffers, wildlife habitat enhancements, and public access for educational purposes, that could merit reductions of mitigation ratios. (AEP)

Response: IDEM disagrees. For the most part, the factors suggested already fall within the provisions of subsection (b)(1).

Comment: The implication of 327 IAC 17-4-7(b)(2), in allowing for the lowering of any mitigation ratio to 1:1 provided that mitigation is complete and demonstrated successful prior to impact, seems to favor mitigation bank usage. The rule needs to emphasize that any compensatory mitigation that would qualify for a reduction to a 1:1 ratio must demonstrate success in replacing the function of the impacted wetland on-site. (DCAS, IWL, SCCC, SDC, SDCF, VWI)

Response: 327 IAC 17-4-7(b)(2) does not, in any way, advocate or favor mitigation bank usage. It provides a mechanism for applicants to begin mitigation projects in advance of known development in order to reduce mitigation ratios. IDEM agrees that the mitigation must demonstrate that it has replaced uses and is successful in order to qualify for the ratio reduction. The draft rule has been modified to reflect this change. IDEM does not, however, agree that the mitigation has to be performed on-site in order to qualify.

Comment: Who decides and by what method of evaluation is successful completion of compensatory mitigation determined according to 327 IAC 17-4-7(b)(2)? According to 327 IAC 17-4-8(b)(1) and (2)? (Hasty)

Response: In addition to the criteria set forth in 327 IAC 17-4-15, success criteria will be established for each individual site based on the following: (1) what is to be lost; and (2) the goals of the mitigation. Methods to be used will be vary

according to the criteria to be measured. Though the applicant proposes methods to be used and criteria to be monitored, IDEM decides if these methods are appropriate before issuance of the Section 401water quality certification. The applicant submits its monitoring in an effort to prove that the site is successful, but IDEM, according to 327 IAC 17-4-13(b), makes the final decision as to the success of the mitigation and subsequent release from monitoring.

Comment: If, according to 327 IAC 17-4-7(b)(2), an applicant agrees to provide completed compensatory mitigation prior to impacting a Tier I wetland, dependent on the type wetland to be impacted, the mitigation may be required at a ratio as high as 4:1; yet, having completed the mitigation in advance of impacts should mean a ratio of only 1:1 is required. The applicant will have provided extra mitigation that is not needed. It would be more reasonable to negotiate an appropriate mitigation ratio prior to allowing an impact to a wetland and require a performance bond to ensure that the mitigation is completed. (IEU)

Response: If an applicant agrees to provide up-front wetland mitigation and the wetland mitigation is proven successful, then the ratio may be reduced to 1:1.

Comment: Will IDEM be doing a hydrogeomorphic wetland assessment to identify wetland types in Indiana? Does the draft rule address acquisition and restoration of wetlands? (LCFGP)

Response: At this time, IDEM does not intend to use the hydrogeomorphic wetland assessment technique to identify wetland types in Indiana. IDEM continues to explore other methods of wetland assessment with U.S. Fish and Wildlife Service, Indiana department of natural resources, and members of the scientific and academic community. The draft rules do not address wetland acquisition or restoration. These activities should be conducted through voluntary or incentive programs such as the Wetland Reserve Program.

Comment: 327 IAC 17-4-7(b)(3) would allow a reduction of the amount of acreage of compensatory mitigation where an applicant proposes wetland preservation, wetland rehabilitation, or a combination of both. However, preservation and rehabilitation of wetlands as compensatory mitigation does not necessarily result in a no net loss of wetland acreage. The acreage to be preserved or rehabilitated already exists as wetland, but if counted as compensatory mitigation, then net wetland acreage is decreased by the acreage impacted at the project site. If wetland preservation and rehabilitation is to be allowed as compensatory mitigation, then the compensatory mitigation component of the ratio should be increased not reduced. (DCAS, HEC, IDNR, IWL, SCCC, SDC, SDCF)

Response: 327 IAC 17-4-7(b)(3) of the water quality certification rule states that an applicant may utilize wetland preservation, rehabilitation, or a combination of the two (2) only if the no net loss of wetland acreage and uses requirement is met. This means that an applicant who qualifies for the mitigation ratio reduction must, in addition to preservation, rehabilitation, or both of existing wetlands, provide restoration or creation of wetlands equal to the acreages of approved impact. For example, a person proposing to impact one (1) acre of emergent wetlands may provide one (1) acre of restored wetlands and one (1) acre of preservation, provided the area preserved is a Tier II wetland as described in the wetland water quality standards. This reduces the ratio and complies with the no net loss criteria.

Comment: The reduction of mitigation ratios allowed according to 327 IAC 17-4-7(b)(2) and (3) is too lenient, undocumentable, and questionably verifiable. It seems these rules have the intent to inhibit the destruction of wetlands, but this provision makes it easy to do so. (Smol)

Response: IDEM disagrees. The reductions to ratios allow for mitigation projects that may greatly improve water quality, such as the preservation of existing wetlands or the restoration of wetlands with more diverse plant communities. This reduction provides incentives to restore and enhance wetlands prudently while continuing to meet the goal of no net loss of wetland acreage. The draft rule provides clear requirements to demonstrate that a given project will meet the criteria set forth in this section of the draft rule.

Comment: 327 IAC 17-4-7(b)(3)(A) should be limited to wetland creation because restoration efforts do not prevent a net loss unless the area to be restored has ceased to function as a wetland for a significant period of time on the order of five (5) years. Restoration of this type, to restore a once functioning wetland to its functioning status, is to be encouraged where governed by appropriate criteria and with the required documentation. A project of this nature is far more likely to

succeed than those that attempt to create a wetland where none previously existed. Therefore, clarification should be included in the rule to favor restoration of historically functional wetlands. (DCAS, IWL, SCCC, SDCF, VWI)

Response: ARestoration @ has been defined in this revised draft. IDEM agrees that restoration is the preferred method for mitigating wetlands, but IDEM does not agree that creation should be ruled out as an option.

Comment: The final statement of 327 IAC 17-4-7(b) states that no mitigation ratio may be reduced below 1:1. However, with this in mind, IDEM will have to take special care to monitor the mitigation ratios employed to ensure that an average of at least 2:1 is obtained because the Environmental Performance Partnership Agreement between EPA and IDEM has established an average mitigation ratio of 2:1 as the goal. With eighty-seven percent (87%) of Indiana =s wetlands already lost, the need to increase wetland acreage is essential. (DCAS, IWL, SCCC, SDC, SDCF, VWI)

Response: IDEM continues to support the goals of Environmental Performance Partnership Agreement between EPA and IDEM. Based on an analysis of historical certification requirements and draft rule requirements, IDEM is confident the goal of obtaining an average of 2:1 mitigation for wetland impacts will be met.

Comment: The requirement of 327 IAC17-4-8(a)(2) that an applicant post a performance bond or irrevocable letter of credit seems beyond the state =s authority in the absence of some evidence that the applicant may not be able to complete the compensatory mitigation. The general enforcement authority of the state and the Corps of Engineers should be sufficient to guarantee completion in most instances. If this requirement is to be retained in the draft rule then it should be that IDEM issues a water quality certification containing a condition that the applicant obtain the requisite financial guarantee within a specified time period. (SIGECO)

Response: Unfortunately, the threat of enforcement by the state and the Corps of Engineers has not been sufficient to insure compliance with the conditions of the water quality certification nor successful completion of the compensatory mitigation. Therefore, IDEM believes that requiring a performance bond at the time of application or requiring up-front mitigation is appropriate.

Comment: The requirement of 327 IAC 17-4-8(a)(2) should be applied to projects that are motivated strongly by economic financial returns; however, a small homeowner or farmer may not be financially capable to incur the cost of a performance bond or irrevocable letter of credit for some minor impact. (ES)

Response: IDEM=s position is that applicants may chose to mitigate project impacts, subject to final approval by IDEM, prior to the initiation of a project. In addition, mitigation banks may be available and permissible for certain impacts. These other options provide flexibility for applicants unable to provide financial assurance for mitigation sites.

Comment: The requirements of 327 IAC 17-4-8(b) that must be met before an applicant can be released from financial assurance are satisfactory if IDEM will be able to implement them with sufficient resources to accomplish the necessary inspection and monitoring throughout the state. Are administrative fees for water quality certification sufficient to cover IDEM=s expenses: Are larger projects subject to increased fees relative to the increased workload for IDEM? (DCAS, IWL, SCCC, SDCF, VWI)

Response: IDEM does not currently charge fees for applications for water quality certifications and is not proposing fees as a part of this draft rule. IDEM has sufficient resources with its current staff to implement all aspects of the rule, including inspection and compliance monitoring of project sites and mitigation sites.

Comment: The requirement of 327 IAC 17-4-9(1) regarding the rate of storm water run-off in a ten (10) year storm could result in further impact to a wetland when the control structure, if required, is constructed. (IDOT)

Response: IDEM would not allow mitigation that would cause further impact to wetlands on a site. The utilization of wetlands that could be avoided on a project site to control flood waters would violate the wetland water quality standards and would not be approved by IDEM.

Comment: To satisfy the requirements of 327 IAC 17-4-9, additional retention basins must be designed and built which could mean taking wooded areas or other high quality habitat areas. If you remove half the capacity of a wetland, you must remove half the water inflow. This will create much more volatility in the fluctuation of the water in the wetland and increase duration of water levels in the wetland and possibly change the plant community by either drowning it or drying it. (IDOT)

Response: IDEM disagrees. The draft rules are not meant to encourage persons to adversely impact other potentially sensitive or environmentally important areas not governed by these rules. The language in 327 IAC 17-4-9 means persons who are allowed to impact, for example, half of a one (1) acre wetland must provide stormwater storage that compensates for the one-half (**2**) acre of storage lost. This cannot occur in the remaining one-half (**2**) acre of unimpacted wetland; stormwater storage structures would be needed to handle the flow that would have been retained by the impacted wetland.

Comment: It is understood that the one (1) parameter that cannot be moved off site from a wetland is flood storage. However, there are circumstances affected by 327 IAC 17-4-9(1) when increased detention of flow in a watershed may have a negative impact on flood events by increasing the duration of peak flow. It is recommended that these storm water control requirements be coordinated with the IDNR Division of Water. (ES)

Response: In situations where a given project may adversely impact flood events, IDNR would be given the opportunity to provide comments on project design and appropriate mitigative measures.

Comment: It is understandable that the requirements of 327 IAC 17-4-9 concerning storm water control are included in the draft rule for reasons of protection of quality and quantity of water flowing from a wetland. In addition, the rule needs to address the quality and quantity of water entering a wetland. Too often a wetland becomes the convenient location to receive post development shunting of storm water so that even if the wetland has not been filled in to facilitate a construction development it becomes degraded by too much water that is unclean, cause of damage to the wetland =s health, and flowing too fast. Many species of wetland wildlife can only live in the cleanest water; nutrients and silt ruin their habitat. As examples, the caddisfly larva, predaceous diving beetles, salamander larva, spring peeper tadpoles, and other species of both plants and animals that form the food web in a really clean water wetland will not be available in a wetland that has been degraded with nutrients and silt. When the diverse native flora of a wetland is harmed, monocultures of reed canary grass and cattails or worse is about all that can be expected to survive. (IWL, SCDG, SDCF)

Response: Water that flows into wetland areas is governed by the water quality standards contained in 327 IAC 2. IDEM continues to work on addressing non-point sources of pollution through regulatory means such the Rule 5 Erosion Control Program and voluntary projects funded by IDEM =s Watershed Management Section. IDEM recognizes that wetland quality is dependent in part on the quality of water that feeds the wetland and is committed to finding ways to address this issue.

Comment: What are the conditions regarding IDEM approving a mitigation bank according to 327 IAC 17-4-10(1)? (IDOT)

Response: The conditions dictating the approval of a mitigation bank will be spelled out in the Interagency Coordination Agreement that the federal and state regulatory and resource agencies are drafting. Approved banks will undergo a chartering process described in this document. Once IDEM has become a signatory to this document, this process will apply to IDEM.

Comment: The Interagency Coordination Agreement in use by the Corps of Engineers is wholly inadequate to assure that mitigation banks are established, maintained, and utilized appropriately. There is too much regulatory and scientific uncertainty with mitigation banks to support their use for compensatory mitigation; therefore, 327 IAC 17-4-10 should be removed from the draft rule. (HEC)

Response: IDEM agrees that the current Interagency Coordination Agreement in use by the Corps of Engineers regarding mitigation banking could be improved; therefore, IDEM has not become a signatory to this agreement. IDEM is in the process of improving the current document to address issues and concerns such as financial assurances and establishment of credits at given bank. IDEM is advocating that all participating agencies adopt a new draft to produce a strong, clear

document to guide this process. This document will be public noticed with opportunity for comment by all interested parties. IDEM disagrees that mitigation banking is inappropriate for the following reasons: (1) wetland banks produce large contiguous areas of wetlands; (2) wetlands are created in advance of impacts; and (3) significant safeguards can be placed on banks to insure financial stability and assurance wetland impacts will be appropriately mitigated and monitored to insure success.

Comment: Please clarify if it is possible that a mitigation bank accepting out of service area projects at a higher mitigation ratio would be in compliance with 327 IAC 17-4-10(4)? (ES)

Response: As IDEM has not signed the formal Interagency Coordinated Agreement on mitigation banking. Specific issues, such as out of service area projects and increased mitigation ratios, have not been formalized. Before signing this agreement, IDEM will solicit public comment on issues related to mitigation banking that will be incorporated into the final agreement. IDEM anticipates this will occur before the draft rules are final adopted by the water pollution control board.

Comment: There is no science or ethics to justify the concept of mitigation banking for the following reasons: (1) trading small wetlands for a large bank defies the reality that many organisms evolve to exist in specific habitats including small ones and cannot be expected to survive being shifted to suit human needs; (2) biological utility is not determined by size; (3) wetlands have evolved locally over thousands of years to integrate into the local ecotypes and removing wetlands must have profound long term effects though not discernable for many years; and (4) wetlands species are local phenomenon even when they are part of a much greater system, and while they may breed with adjacent populations, they may not be able to with more distant populations. (Smol)

Response: IDEM agrees that even small wetlands have great value especially in light of the eighty-five percent (85%) loss of wetlands in Indiana. Where wetlands were not completely destroyed, they were fragmented by development or shrunk by drainage. The result is that the Indiana landscape that once supported large wetland complexes is now dotted with degraded remnants. IDEM, also, has noted, during the course of our mitigation study, that large mitigation sites tend to out perform smaller sites. Mitigation banks can also provide long term management that just is not possible for smaller mitigation sites. Due to economies of scale, mitigation banking may also allow regulators to require mitigation in cases were mitigation was deemed not practicable @in the past. This should mean a reduction in area of wetland lost.

Comment: Included in 327 IAC 17-4-11(b) should be a description of the existing conditions at the proposed mitigation site. Soils information would be particularly useful in demonstrating the possible previous existence of a wetland. To redevelop a wetland in an area that historically supported a wetland would be the best use of mitigation money and effort. (DCAS, IWL, SCCC, SDCF, VWI)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: The hydrology to be considered in a wetland compensatory mitigation plan according to 327 IAC 17-4-11 should acknowledge that ground water fed hydrology is superior to catch basin hydrology in planning mitigation. (IWL, SCDG, SDCF)

Response: IDEM disagrees. While many wetland systems in the state are partially or wholly driven by ground water hydrology, there are wetland systems that rely on surface water flow and flood flows. It is inappropriate for IDEM to advocate one type of hydrology regime over another because this would be in direct conflict with the intent and purpose of these draft rules. Wetland mitigation must replace designated and existing uses, and to do so must recreate impacted wetlands using appropriate plants, hydrology, soil conditions, and landscape position.

Comment: It is recommended that the term Aconditions @ used in 327 IAC 17-4-11(b)(1) be replaced at this citation and throughout the wetland rules because conditions are imposed, and the word is more properly used when referring to permit conditions. (IWL)

Response: IDEM does not believe usage of the term will cause confusion.

Comment: It is recommended that 327 IAC 17-4-11(b)(1)(B) read: "Type of vegetation, including native, exotic, and invasive species." (IWL, SDCF)

Response: IDEM concurs and has modified the draft rule to reflect this change.

Comment: The draft rule should specify a time period for IDEM to issue a completeness determination and a final decision of a wetland compensatory mitigation plan under 327 IAC 17-4-11(d) and wetland compensatory mitigation monitoring plan under 327 IAC 17-4-13(a). (NSWMA, SIGECO, IMA, NSWMA)

Response: The applicant will have to submit a mitigation plan only if required by IDEM. IDEM has not established a time frame when the applicant must submit a mitigation or monitoring plan and does not see a need to impose a time frame upon the department. Wetland mitigation plans differ in complexity, and a single time frame for review may not allow adequate review of some plans. Furthermore, there is frequent discussion back and forth between the department and the consultant designing the mitigation site, and the consultant is often making last-minute changes for reasons other than the department's request.

Comment: The term "adequately" used in 327 IAC 17-4-12(1) is too open to interpretation and could imply that a mitigation ratio of less than 1:1 might be allowed. The language is recommended to be modified to: "The existing and designated uses lost by impacting an existing wetland will be replaced by compensatory mitigation providing uses equal or superior to the lost uses." (DCAS, IWL, SCCC, SDCF, VWI)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: 327 IAC 17-4-12(2)(C) should also consider the proximity of the site of impact to other waters or natural areas. (IWL, SDCF)

Response: IDEM assesses the proximity of the site of the impact to other waters or natural areas during the review of water quality certifications.

Comment: 327 IAC 17-4-12(2)(D) should also consider the proximity of exotic plant species to the proposed compensatory mitigation site. (IWL, SDCF)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: Is a buffer zone listed at 327 IAC 17-4-12(2)(E), among the factors of probability of success, to become a part of all mitigation projects, and, if so, will credit be granted for land set aside as a buffer? (ES)

Response: 327 IAC 17-4-12(2) lists the factors IDEM will consider in determining the potential for success of a proposed wetland mitigation site. The inclusion of a buffer zone will improve, but not guarantee, the chance of success of the mitigation site. Therefore, IDEM will consider a buffer zone to be a factor that will more likely improve the chance of success of the given mitigation site. It is not a factor that is required of all mitigation sites, and a buffer zone included in a mitigation plan will not be counted towards the wetland mitigation ratio. This does not preclude other agencies from counting upland buffers toward their mitigation requirements.

Comment: How is the size determined for a buffer zone required around a compensatory mitigation site according to 327 IAC 17-4-12(2)(E)? The necessary buffer zone depends on the size, complexity, and ecotype of the wetland. (Hasty, Smol)

Response: The size of a given buffer around a wetland mitigation site would be determined on a case by case basis taking account of the size, complexity, and ecotype of the wetland. IDEM will evaluate a proposed buffer zone to determine if it would enhance the success of a given mitigation site, and in what ways will it could enhance success, such as, for example, a buffer may provide corridors for movement of organisms dependent on the wetland.

Comment: A proposed plan for the long term management of a proposed compensatory mitigation site as required by 327 IAC 17-4-12(2)(I) should not be required of an applicant since very few impacted wetlands have this sort of requirement. (IBA, JFN, NiS)

Response: 327 IAC 17-4-12(2) lists the factors IDEM will consider in determining the potential for success of a proposed wetland mitigation site. These factors are not requirements. As an example, a proposed plan for the long term management of a proposed compensatory mitigation site as required by 327 IAC 17-4-12(2)(I) could be the transfer of the wetland mitigation site, upon completion, to an organization dedicated to the conservation of wetlands or its inclusion into a managed area such as a park or nature preserve.

Comment: Does the long term management plan required by 327 IAC 17-4-12(2)(I) mean the three (3), five (5), or seven (7) years associated with compliance monitoring? (ES)

Response: The long term management plan required by 327 IAC 17-4-12(2)(I) does not mean the three (3), five (5), or seven (7) years associated with compliance monitoring. It refers to the active management of the wetland mitigation site after completion by the applicant or a third party. As an example, a proposed plan for the long term management of a proposed compensatory mitigation site as required by 327 IAC 17-4-12(2)(I) could be the transfer of the wetland mitigation site, upon completion, to an organization dedicated to the conservation of wetlands or its inclusion into a managed area such as a park or nature preserve.

Comment: As an alternative to the long term management required of 327 IAC 17-4-12(2)(I), wetland bank usage can be accepted. (NiS)

Response: A mitigation bank is not an alternative to the long term management required of 327 IAC 17-4-12(2)(I). 327 IAC 17-4-12(2) lists the factors IDEM will consider in determining the potential for success of a proposed wetland mitigation site. These factors are not requirements. By definition, wetland mitigation banks have long-term management plans.

Comment: If long term management of a created wetland is required by 327 IAC 17-4-12(2)(I), then long term management of an existing wetland should become an alternative form of mitigation. (JFN)

Response: This proposal is inconsistent with the no net loss goals set forth in this draft rule. Maintenance of existing wetlands is a worthwhile and needed activity, but it in no way compensates for lost wetland uses and adverse impacts to water quality associated with impacts associated with a regulated activity.

Comment: Under 327 IAC 17-4-13, could a generic monitoring plan be developed for IDOT projects? (IDOT)

Response: All monitoring plans must provide information that describes the specific conditions at a given mitigation site. An applicant may base other monitoring plans from an approved plan provided the unique aspects of a given site are accounted for and described in each plan.

Comment: Mitigation monitoring may be expensive, but without it the cost of mitigation sites may be wasted while natural wetlands lost without just compensation to the environment. (IWL, SCDG, SDCF)

Response: IDEM concurs with this statement. IDEM strongly believes that wetland mitigation can work to replace wetlands but only if the site is carefully monitored. Monitoring insures problems are found and corrected and that the site is adequately replacing the uses of the original wetland.

Comment: Upon passing the two (2) year success criteria and receiving a letter from IDEM according to 327 IAC 17-4-13(b) confirming that success, will there be any longer term monitoring or management required to ensure that a compensatory mitigation site maintains wetland functions?(Hasty, IWL)

Response: Once a mitigation site has been demonstrated to be successful at recreating the impacted wetland and the

associated uses, the applicant will be released from further monitoring and management of the site. This is consistent with current policy on both the state and federal level. Once a wetland has been successfully replaced, there is no additional need for long-term management from a regulatory perspective.

Comment: Is there a valid, scientific reason behind the requirement of 327 IAC 17-4-13(c)(1) that monitoring should occur only within a limited portion of the growing season? Later season monitoring is usually appropriate; however, in some sedge dominated communities, an earlier season monitoring may be preferred. (ES)

Response: IDEM will allow applicants an opportunity to provide evidence that the proposed wetland types require early monitoring. IDEM has modified the draft rule to reflect this.

Comment: The wording of 327 IAC 17-4-13(c)(2), allowing monitoring to occur annually within thirty (30) days of the initial monitoring that may be as late as October 31, would potentially allow annual monitoring of vegetation as late as November 30. This is too far beyond the growing season in parts of Indiana to be meaningful; the latest possible monitoring time allowed by this rule should be at least a month earlier than what is currently contained in the rule. (DCAS, IWL, SCCC, SDCF, VWI)

Response: IDEM agrees. The draft rule will be modified to prohibit monitoring past October 31.

Comment: It is requested that the wording of 327 IAC 17-4-13(c)(2) be modified to say that monitoring must occur annually, typically within thirty (30) days of the anniversary date because a target community could be missed, for example with a wet meadow planted with sedge and prairie species. Both are acceptable communities, but one (1) is early and the other is late season. (ES)

Response: Commonly measured wetland mitigation parameters such as abundance, frequency, and aerial coverage fluctuate greatly throughout the growing season (Swink and Wilhelm1994). Therefore, monitoring that occurs early in the first year and late in the next year will show a change in vegetation that has nothing to do with the maturation of the site. Monitoring must occur at the same time each year to minimize the variation caused by seasonal changes in the vegetation. If the applicant must monitor at a time other than the anniversary date, the monitoring period will start over. IDEM has modified the rule at 327 IAC 17-4-13(c) and (d) as follows:

A(c) Vegetation monitoring must occur:

> (1) between June 1 and and no later than October 31 unless the applicant provides compelling scientific evidence that the wetland type proposed requires earlier monitoring; and
>
> (2) annually within thirty (30) days of the anniversary date of the first monitoring event.

(d) The monitoring period shall start over if monitoring occurs other than as required by subsection (c). @.

Comment: The inclusion of requirements to monitor macroinvertebrates, amphibians, and soils according to 327 IAC 17-4-13(d)(6)(E), (F), and (I) is to be applauded though it has been overlooked in other parts of these rules and should be included. (Smol)

Response: Protection for all aspects of wetlands, including those concerning macroinvertebrates, amphibians, and soils, are clearly defined in the wetland water quality standards contained in 327 IAC 2-1.8-3 and 327 IAC 2-1.8-6.

Comment: What definition is being use for the terms Anative nuisance species @ and Aexotic species@, and is there a reference list of these species available for Indiana? Does the reference to Aexotic species@ in 327 IAC 17-4-13(f)(1)(A) mean all exotics or just invasive exotics? (IDOT)

Response: The term Anative nuisance species @ will be eliminated from the draft rule since it referred only to Typha spp. AExotic species@ refers to those species listed in 327 IAC 17-4-15(2). 327 IAC 17-4-13(f) shall be 327 IAC 17-4-13(g) in the draft rule presented for preliminary adoption wherein 327 IAC 17-4-13(g)(1) reads as follows: A(1) The site complies with section 15 of this rule. @.

Comment: It is unreasonable to expect an applicant to prevent exotic or native nuisance species from entering a mitigation site and maintain the site limited from such species when the undesirable species are prevalent and sometimes dominant in the surroundings providing a naturally occurring seed bank. For this reason, an extended monitoring period according to 327 IAC 17-4-13(e) and the difficulty in meeting the requirements of 327 IAC 17-4-13(f) in order to be released from the extended monitoring are burdensome. (IDOT)

Response: IDEM disagrees. The control of exotic species listed in the rule is practicable and economically feasible. Applicants considering various sites as potential wetland mitigation sites must take into consideration all factors that could adversely affect the success of the mitigation, including the potential for invasion of exotic plant species. Numerous practices are available to control the spread of exotics in the early stages of wetland development as well as control of exotics during monitoring. The criteria set forth in section 13 of the draft rule are necessary to insure successful mitigation occurs.

Comment: Why does the success criteria in 327 IAC 17-4-15 place such emphasis on exotics? There is a wealth of scientific literature suggesting that hydrology is often the most critical factor in the success or failure of a mitigation wetland. (Hasty)

Response: The draft rule only addresses success criteria that can be applied to all mitigation sites. Hydrology is addressed in general terms in 327 IAC 17-4-15(1) where it is stated that, AWetland areas of a compensatory mitigation site must meet the wetland jurisdictional requirements of the Corps of Engineers. @. Due to the variability of wetlands, further generalization would be imprudent. Instead, the draft rule language contained in 327 IAC 17-4-15(7) states that a site must meet the success criteria set forth in the approved compensatory mitigation plan. This language allows IDEM to require site specific success criteria, including appropriate hydrology criteria.

Comment: The requirement of 327 IAC 17-4-15(2) stating that a compensatory mitigation site must be free of Eurasian water milfoil in order to be judged successful needs to be deleted from the rule. Purple loosestrife and common reed are emergent plant that can be controlled by mechanical means or herbicides, but Eurasian water milfoil is an aquatic bed species that cannot be effectively controlled by any means. (AEP, ES, IEU, IMA, JFN, NiS, SIGECO)

Response: The condition of the site, not the applicant =s abilities, determines whether the mitigation site has replaced uses. Allowing failure for any reason, including technical or financial incapabilities, is untenable. Additionally, there are significant differences between the species currently listed in 327 IAC 17-4-15(3) and Eurasian water milfoil. Cattails (Typha spp.) are native species. Reed canary grass (Phalaris arundinacea) appears to have less aggressive native strains (Swink and Wilhelm 1994). Both occur in low frequency in many of Indiana =s least disturbed habitats. There is no doubt about the origin of Eurasian water milfoil (Myriophyllum spicatum); it is an alien to Indiana (Swink and Wilhelm 1994). Deam did not include it in his Flora of Indiana, and Swink and Wilhelm report that it was first collected in the Chicago Region in 1970. This suggests that it is a recently introduced exotic pest. Allowing Eurasian water milfoil to exist on a mitigation project not only endangers the long term viability of the mitigation site but also jeopardizes eradication efforts in nearby or connected waterbodies.

Comment: The inclusion of exotic control and the requirement for less than fifteen percent (15%) of cattail and reed canary grass is entirely appropriate. As well, cattail and reed canary grass should not be allowed to be considered as a part of the seventy percent (70%) vegetation cover required by 327 IAC 17-4-15(5). There could be an insurmountable seed bank of exotics at a proposed mitigation site so it is good that the rule require a mitigation plan under 327 IAC 17-4-18(2)(d) to consider the existing exotic plants. (IWL, SCDG, SDCF)

Response: The draft rule has been modified to clarify that neither cattail nor exotic species will be considered in the seventy percent (70%) calculation in 327 IAC 17-4-15(5). IDEM agrees about the need to limit the percentage of cattail and reed canary grass found in a wetland mitigation site and the need to consider the presence of existing exotic plants at

a potential wetland mitigation site.

Comment: Eurasian water milfoil needs to be removed from 327 IAC 17-4-15(2), but it could be included under 327 IAC 17-4-15(3). (ES)

Response: There are significant differences between the species currently listed in 327 IAC 17-4-15(3) and Eurasian water milfoil. Cattails (Typha spp.) are native species. Reed canary grass (Phalaris arundinacea) appears to have less aggressive native strains (Swink and Wilhelm 1994). Both occur in low frequency in many of Indiana =s least disturbed habitats. There is no doubt about the origin of Eurasian water milfoil (Myriophyllum spicatum); it is an alien to Indiana (Swink and Wilhelm 1994). Deam did not include it in his Flora of Indiana, and Swink and Wilhelm report that it was first collected in the Chicago Region in 1970. This suggests that it is a recently introduced exotic pest. Allowing Eurasian water milfoil to exist on a mitigation project not only endangers the long term viability of the mitigation site but also jeopardizes eradication efforts in nearby or connected waterbodies.

Comment: The draft rule must take into consideration the fact that it may be impossible to create a mitigation site free of exotic species or must advocate off site mitigation. Recently, a site was found comprised of a mono-typic stand of *Pragmites australis* which had been part of a long term bird survey. The state endangered and candidate for federal endangered status Virginia rail occupied the site following infestation of *Phragmites australis* , and the bird population has increased with the spread of the exotic. (ES)

Response: The draft rule does advocate off-site mitigation under 327 IAC 17-4-5(b) when on-site compensatory mitigation has a low probability of success. Arguably, an on-site location that puts the mitigation site at risk for infestation would have a low probability of success and would, therefore, be eligible for off-site mitigation. Also, up to fifteen percent (15%) surface area coverage of reed canary grass (Phalaris arundinacea), the most prevalent of the invasive exotics in Indiana mitigation sites, is allowed by this draft rule (327 IAC 17-4-15(3). As for the Virginia rail, even degraded wetlands perform many important functions, including providing habitat for endangered species. This example does not, however, provide conclusive evidence that exotic plant species offer similar habitat as wetlands that are not infested or have lower levels of infestation of exotic plants.

Comment: The term Aaerial@ used in 327 IAC 17-4-15(3) and (4) seems odd and inapplicable. (SDC)

Response: IDEM will replace Aaerial@ with Asurface area@.

Comment: According to 327 IAC 17-4-15(4), greater than ten percent (10%) aerial coverage of open water or bare ground may be allowed in a compensatory mitigation site if the natural wetland had those components in amounts greater than ten percent (10%). It seems reasonable to apply this same concept to the issue of the presence of exotic or nuisance species that are present naturally in amounts greater than allowed by the draft rule. (IDOT)

Response: Open water is not Ainvasive@ and is unlikely to spread into other areas of the site after IDEM releases the applicant from monitoring.

Comment: The allowance of 327 IAC 2-1.8-7(a)(3)(D) for up to ten percent (10%) invasive exotic species in a wetland recommended as an OSRW is more lenient than the requirement of 327 IAC 17-4-15(2) that says a compensatory mitigation site must be free of exotic species. If ten percent (10%) is acceptable for an outstanding wetland, it follows that a mitigation site should not be required to meet a higher standard. It is recommended that the draft rule be modified to require that a successful mitigation site should not have more than twenty-five percent (25%) exotic species. (Gary, NiS)

Response: IDEM has removed the language pertaining to OSRWs and will include it in the rulemakings yet to be undertaken as a requirement of SEA 431.

Comment: The success criteria for a wetland compensatory mitigation site described in 327 IAC 17-4-15(3) limit the combined aerial coverage of reed canary grass and Anative, nuisance species, cattail... @. Cattail species are not always nuisance species; they can, in fact, be quite valuable and beneficial habitat in many circumstances. It is recommended

that the modifiers, Anative, nuisance species @, be removed so the rule text simply reads, A...reed canary grass *(Phalaris arundinacea)* and cattail *(Typha spp.)*...@. (IDNR)

Response: IDEM agrees and has modified the draft rule by removing the term Anative nuisance species @ and replacing it with Acattail (Typha spp.) @.

Comment: There are communities such as a hemimarsh in which cattail is classically the dominant species. This community may not frequently be impacted, but it should not be excluded by the draft rule. A statement as found in conclusion of 327 IAC 17-4-15(4) could also be included in 327 IAC 17-4-15(3) to allow an applicant to document that the wetland for which mitigation is being developed had a greater percentage coverage of cattail. (ES)

Response: IDEM agrees and has modified the draft rule to reflect this change.

Comment: The minimum success criteria of 327 IAC 17-4-15(6) requiring the replacement of existing and designated uses lost at the impacted wetland need longer than two (2) years to be assessed to provide conclusive evidence that a compensatory wetland has adequately replaced uses that are lost or disturbed. (HEC)

Response: It is anticipated that applicants will monitor a mitigation site between three (3) and seven (7) years before the site meets the success criteria for the first time. The draft rule was written this way to put less emphasis on process and more emphasis on results. If the site meets its success criteria for two (2) consecutive years, IDEM will release it from monitoring. If it takes three (3) years to meet these criteria, IDEM will release the site after three (3) years. On the other hand, if the site requires seven (7) years to meet these criteria, then IDEM will release the site after seven (7) years of monitoring.

Comment: A remediation plan required under 327 IAC 17-4-16(b) for an unsuccessful compensatory mitigation site needs to also require an applicant to submit a new two (2) year monitoring plan. (IWL, SCCC, SDCF, VWI)

Response: Monitoring will likely take between three (3) and seven (7) years before the site meets the success criteria for the first time. The rule states that monitoring will continue until the site meets these criteria for two (2) consecutive years. The remediation is meant to facilitate success through necessary changes in the mitigation. Remediation does not relieve the applicant from monitoring responsibility. The monitoring triggers remediation action and continues until the success criteria have been achieved for two (2) years.

Comment: Why have mitigation sites that obviously do not meet success criteria been released without any form of remediation and will that kind of occurrence change once these rules are effective? Does IDEM have sufficient staff and expertise to determine mitigation success for every site constructed? How will IDEM track remediation or even initial construction of mitigation sites if it does not have sufficient staff? (Hasty)

Response: IDEM has not released any mitigation site that has not met success criteria and is actively reviewing mitigation sites to determine appropriate compliance actions. The draft rules clearly spell out penalties for failure to achieve success criteria, such as increased monitoring, corrective actions, and forfeiture of performances bonds or lines of credit. Provided current resources are not curtailed, IDEM has sufficient resources, when coupled with increased partnering with EPA and the Corps of Engineers, to insure mitigation sites are constructed properly. To bolster existing resources, IDEM is developing a comprehensive water quality certification data base to improve tracking of mitigation site success, insure compliance with certification conditions, and identify potential issues so that swift corrective actions can be taken. Applicants must prove the mitigation site successful through monitoring. IDEM currently has a staff person who checks the compliance of these sites though it is true there may not be enough staff to check every site. IDEM is confident that random inspections coupled with stringent enforcement will result in an increase in mitigation compliance and accurate reporting.

Comment: The opportunity for remediating a failed or failing compensatory mitigation site as allowed by 327 IAC 17-4-16 is open invitation to sloppy planning, poor execution, and bad management. The rules should require instead that an applicant responsible for a mitigation site not achieving success must forfeit escrow, pay an additional fine, and have

the water quality certification and all outstanding permits revoked. (Smol)

Response: IDEM disagrees. The draft rule spells out procedures for remediating mitigation sites because IDEM recognizes that things can and do go wrong. Unforseen circumstances, such as flooding, drought, plant disease, or predation, can significantly affect the success of a mitigation site and require corrective action. The draft rule insures that applicants will not design faulty mitigation by requiring the following: (1) mitigation must plans be approved by IDEM prior to the issuance of certification; and (2) the applicants must provide a performance bond or letter of credit as insurance against deliberately poor plans. In the event that an applicant fails to construct mitigation properly, this bond or line of credit would be used by IDEM to take corrective actions. This does not preclude IDEM from seeking additional penalties, nor does it prevent separate enforcement action from EPA or the Corps of Engineers. The approach detailed in the draft rule is reasonable, allows applicants to develop mitigation sites using techniques and technology that is appropriate and needed, and provides a mechanism that insures wetland mitigation will be constructed and deemed successful in all cases.

Comment: Considering the requirements of 327 IAC 17-4-17, what if a project is on a legal ditch? Mitigation and tree planting are at the mercy of the county drainage boards who have the right to dredge and remove improvements. In 327 IAC 17-4-17(b)(4), could UTM coordinates which are more accurate be used instead of latitude and longitude coordinates? (IDOT)

Response: IDEM would not approve mitigation sites located within the seventy-five (75) foot easement maintained by county surveyors on legal drains. IDEM agrees with the usage of UTM coordinates and has modified the draft rule to include them.

Comment: If the meaning of 327 IAC 17-4-17 is that dredging projects are to require mitigation, then the rule has wisely considered these impacts too. (IWL, SCDG, SDCF)

Response: Projects that adversely impact waters other than wetlands will be required to mitigate for all unavoided impacts as specified in 327 IAC 17-4-17. This covers such regulated activities as channel realignment, bank stabilization, or other such alterations of waters other than wetlands. The dredging of streams may be regulated depending on how the project is conducted.

Comment: The requirement of 327 IAC 17-4-22(1)(B) seems reasonable except in strict interpretation and consideration of the rehabilitation of degraded streams or ditches where the goal of the project is not to maintain existing grade, hydraulics, and basic channel geometry but to improve conditions that may require modifying all or some of the stated characteristics. (JFN, NiS)

Response: The requirement of 327 IAC 17-4-22(1)(B) would not be triggered if IDEM determines under 327 IAC 17-4-3 that compensatory mitigation is not required. Under 327 IAC 17-4-3(b), a project of the type noted would require mitigation only if it were determined it would cause significant adverse impacts to water quality. In the case of stream restoration or rehabilitation, it is highly unlikely that mitigation would be required since the goal of the project is to improve water quality.

Comment: Projects affecting waters other than wetlands under 327 IAC 17-4-22 typically have impacts on a stream channel bottom that will affect mollusks and other invertebrates; therefore, all monitoring plans and reports for such projects need to include an assessment of benthic communities in addition to the other required elements. (HEC)

Response: The requirement for assessments of benthic communities is stated in 327 IAC 17-4-22(c).

Comment: The requirement of 327 IAC 17-5-1(a)(3)(D) concerning the prohibition on an impact to an OSRW or an ONRW not lasting more than a year should specify that impact means both the direct disturbance to a wetland and any subsequent effects of that disturbance. The rule needs to clarify the extent of any impact that must be confined to within a year and who is responsible for making the determination about the extent and duration of an impact. (DCAS, HEC, IWL, SCCC, SDCF, VWI)

Response: IDEM has modified the draft rule to clarify that it will also consider secondary impacts of proposed projects in ONRWs. IDEM is responsible for making all determinations about potential impacts associated with a proposed project.

Comment: 327 IAC 17-5-1(b) specifies that IDEM will include monitoring requirements in a water quality certification, but what are the guidelines for determining what the possible monitoring requirements under 327 IAC 17-4-13(b) and 327 IAC 17-4-21(b) will be? (IDOT)

Response: The minimum requirements for mitigation monitoring are found at 327 IAC 17-4-13(d) for wetlands and 327 IAC 17-4-21(d) for waters other than wetlands. IDEM may require additional monitoring beyond the minimum requirements on a case by case basis and will specify these requirements in an approved water quality certification. Specific monitoring requirements will be drafted to ensure that the uses lost at the impact site have been replaced by the mitigation and that the mitigation is healthy and self-sustaining.

Comment: IDEM should not be allowed a one (1) year time frame according to 327 IAC 17-5-1(a)(5) before waiving a water quality certification. A sixty (60) day time frame should be sufficient. (IDOT)

Response: IDEM disagrees. The federal Clean Water Act specifically states under Section 401 that a water quality certification is deemed waived only after the state has failed to act on such a request within one (1) year. IDEM must follow the federal language.

Comment: Revocation or modification of a water quality certification as described in 327 IAC 17-5-2 may be warranted where new data becomes available. To be meaningful, new data would have to be available while there is time to spare the destruction of the wetland concerned. (DCAS, IWL, SCCC, SCDG, SDCF, VWI)

Response: IDEM agrees. Some projects that require certification are not built within the first year after a certification is issued or, in some cases, within the two (2) year time frame. In these cases, should new information warrant revocation or modification, IDEM would be empowered to act upon this information. Obviously, if IDEM issues a water quality certification and the wetland is impacted, subsequent information would be of limited value unless such information indicated violations of certification conditions or reasonable needs for modification of aspects of a project.

Comment: If a water quality certification is to be modified or revoked, it should necessitate that the entire process of public notice and maintenance of mitigation ratios and monitoring are revisited. (IWL)

Response: If a water quality certification is revoked, then IDEM sees no need to issue another public notice since the project will no longer be authorized. If a certification is to be modified, then IDEM would issue a supplemental public notice pursuant to 327 IAC 17-2-2(e)(3). If the modification concerned the compensatory mitigation to be provided, then the public would have an opportunity to comment on the proposed changes.

Comment: A water quality certification granted or waived by IDEM should not expire at the end of two (2) years, as specified by 327 IAC 17-5-3(a), if work is not commenced within wetlands or other waters because many projects cannot proceed in this short time frame. Since impacting a Tier II wetland requires mitigation completion prior to initiating impacts, wetland mitigation bank usage would be the only way to complete a project inside of two (2) years. It would seem that this would require establishment of mitigation banks in all eight (8) digit watersheds. (ES, IDOT, JFN, NiS)

Response: IDEM believes the two (2) year expiration date is reasonable. In instances where delays occur, IDEM has revised the rule to allow for renewal of certification provided certain conditions are met. Allowing more time to complete a project is unreasonable without an opportunity to review for the possibility that conditions at the site may have changed, revisions to the project may have occurred, or other factors may have changed requiring some form of review to insure compliance with water quality standards. This position is consistent with current limitations.

Comment: 327 IAC 17-5-3(b)(2) regarding revocation or modification of water quality certification for a general permit appears to be inconsistent with 33 C. F. R. ' 330.4(c)(7) which requires the Corps of Engineers Division *[sic. District]* Engineer to determine whether a state has a basis for an attempted suspension, modification, or revocation for a water

quality certification for a nationwide permit. (Coal)

Response: The authority of the Corp of Engineers to limit a state =s ability to modify or revoke a certification issued for a general permit is unclear. In any event, the cited Corps of Engineers regulation refers to a substantial basis for the modification or revocation to the nationwide permit. IDEM believes a determination that the general permit is causing or contributing to significant impacts to water quality would meet this test.

Comment: Is it the customary practice of IDEM concerning other permits and control documents to provide notice of the final decision by certified mail to persons who submitted comments or who requested notice of the final decision as is required by 327 IAC 17-6-1(a)? (SDC)

Response: No, it is not. However, sending notices of the final decision by certified mail eliminates any question as to whether a potentially affected party actually received notice of the decision.

Comment: It is recommended that all requirements and conditions placed in a water quality certification be based on the requirements of these rules and not reliant on nonrule policy decisions. (IWL)

Response: IDEM has drafted these rules to encompass all relevant criteria and standards needed to condition an approved water quality certification. At this time, IDEM has no need to draft nonrule policy documents to supplement this draft rule.

Comment: What is the appeals process according to 327 IAC 17-6 and how speedy is it? Does the process have a reasonable time limit for taking action on water quality certifications or inquiries? (IDOT)

Response: All final decisions rendered by IDEM are subject to administrative review under IC 4-21.5-3-5, the Administrative Orders and Procedures Act. The length of time it takes to go through the appeals process varies depending on such factors as the number of issues appealed, the basis for the appeal, and the number of cases already pending at the Office of Environmental Adjudication. IDEM is bound by law to follow this appeals procedure.

Comment: 327 IAC 17-7-3 needs to state that an order to a person not complying with the provisions of a water quality certification or the wetland water quality standards will contain a penalty. An applicant needs to be made aware that impacting a wetland without having received a Section 401 water quality certification will result in a penalty. IDEM =s very limited resources continually compromise the effective implementation of its water quality protection programs, and enforcement measures remain lax. Hopefully, water quality certification will require a review fee substantial enough to cover IDEM staff time required for processing the application and monitoring mitigation. Penalizing those that disobey the law should be a much needed source of income to support adequate enforcement of these rules. Section 401 of the Clean Water Act calls for a fine of twenty-five thousand dollars ($25,000) per day per violation. (DCAS, GIW, HEC, IWL, SCCC, SCDG, SDC, SDCF, VWI)

Response: IDEM may impose penalties pursuant to the provisions of IC 13-30. However, IDEM believes there may be cases where a penalty may not be appropriate; therefore, the draft rule should not require a penalty in all cases. IDEM does agree that persons who repeatedly request after the fact certifications should be assessed stiffer penalties. At this point, IDEM is not requiring an application fee.

Comment: The Corps of Engineers freely passes out after the fact permits, and this contributes to the continued loss of wetlands in Indiana. It is suspected that a well connected attorney in northern Indiana advises developers to go ahead with construction without applying for a water quality certification because it is well known that there will be no significant penalty for doing so. Finally having state rules for the wetland program should not continue to allow and foster this kind of violation. In the least, to apply for a water quality certification after initiating a project should cost the applicant considerably more than a properly submitted application with the hope to provide some deterrence. (GIW)

Response: There are no fees for applications for certification; therefore, it will not cost an applicant who applies for an after the fact certification. However, this person would be subject to penalties and an enforcement action under IC 13-30.

Comment: The draft rules need to contain stated penalties in 327 IAC 17-7-4; otherwise, there is no incentive to follow the rules. (GIW, IWL, JFN)

Response: IDEM has modified the draft rule to add specific reference to the penalties enumerated in

IC 13-30.

Comment: It is recommended that the rule language at 327 IAC 17-7-3(b) be expanded to: AIf the department determines that a person is violating, has violated, or is about to violate.... @. (IWL, SCCC, SDCF, VWI)

Response: This provision reflects the statutory language of IC 13-18-4-6. IDEM would issue a cease and desist order if a person were to violate or about to violate a requirement, law, or rule.